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ABSTRACT

This book contains the results of a study examining post-secondary education in the South Pacific by surveying the number of educational opportunities currently offered, by analyzing key trends, and by comparing developments in the Cook Islands and the Solomon Islands. Following an introductory section on terminology and the region, the first main section describes current post-secondary educational opportunities in detail including sources, courses, qualifications, and access. This section concludes that increased demand for education has pressured governments to allocate resources at all levels and has encouraged diversification among sources of post-secondary education. The next section compares the Cook and Solomon Islands, the latter one of the area's largest nations and the former one of the smallest. The chapter on trends and policy options discusses a culture of continuous learning, curriculum issues, qualifications, educational quality, student and staff mobility, management, equity issues, finance, and economic development. A final section looks toward the next century and recommends extending choice, increased self-financing, accepting new national contexts, strengthening institutions, internationalizing education, encouraging science and technology, encouraging lifelong learning, strengthening curricula, acknowledging mobility, ensuring personal development, and developing personal and social values. An index is included. (Contains over 80 references.) (JB)

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Educational Development in the Small States of the Commonwealth

Post Secondary Education in the South Pacific

ED 386 132

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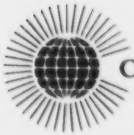
Post-Secondary Education in the South Pacific

Present Patterns and Future Options

Ron Crocombe
Marjorie Tuainekore Crocombe

HE 0221 540



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Preface

The challenge set by smallness of national scale is nowhere more evident than in the efforts of the world's smallest states to provide post-secondary education for their citizens. For small countries to find a sustainable niche in the political and economic world community requires investment in people; in the development of skills and capacities to exploit and develop whatever comparative advantage exists or can be created.

The South Pacific is a region where this challenge is being addressed in a variety of ways. The provision of a range of specialist national institutions is not an option for island countries, most of which have a population of under 500,000. But this is not an argument for neglecting post-secondary education at the national level. As this volume in the Challenge of Scale series demonstrates there is a remarkable range of educational activity taking place, within national colleges and outside them; and provided by an array of actors including government, the churches, the private sector, NGOs, international companies and overseas educational institutions.

The difficult balancing act for small states is to determine how far they wish to strengthen this national capacity, including, in some cases, the possibility of creating national universities, and how far it is through access to regional and international provisions that national interests are best served.

Ron and Marjorie Tuianekore Crocombe have spent their lives in the service of education in the South Pacific. Their experience has given rise to firm views on the directions which post-secondary education should take in their region. These views are forcibly expressed in this study. They are views which deserve debate and not only in the South Pacific. For the Crocombes the challenge for

small states is to strengthen national provisions; ensure greater equity in the availability of regional opportunities; and widen the exposure of Pacific islanders to the countries of the Pacific Rim.

The ideas expressed in this study are those of the authors alone. They do not represent an official position taken by the Commonwealth Secretariat.

Education Department
Human Resource Development Division
Commonwealth Secretariat
1994

The authors

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Ron Crocombe was in government service in the Cook Islands before becoming a director of a research institute in Papua New Guinea. He was the founding Professor of Pacific Studies and director of the Institute of Pacific Studies at the University of the South Pacific. He has held appointments at the Australian National University, the University of California, the University of Hawaii, and the University of Canterbury. He is an emeritus professor of the University of the South Pacific and is Chairman of the Cook Islands National Commissions for UNESCO.

Both authors have published extensively on education and other topics. They live in Rarotonga, Cook Islands.

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List of Abbreviations

ADB	Asian Development Bank
AIDAB	Australian International Development Assistance Bureau
Atenisi	Atenisi Institute and University, Tonga
CAPE	Center for Advancement of Pacific Education
COL	Commonwealth of Learning (Vancouver, Canada)
COPE	Council on Pacific Education
CYP	Commonwealth Youth Programme
DWI	Divine Word Institute, Madang, Papua New Guinea
EPOC	ESCAP Pacific Operations Centre (Vila, Vanuatu)
ESCAP	UN Economic & Social Commission for Asia & the Pacific
FAO	Food & Agriculture Organisation of the United Nations
FFA	Forum Fisheries Agency (Honiara)
FSM	Federated States of Micronesia
FSM	Fiji School of Medicine (Suva, Fiji)
ICAO	International Civil Aviation Organisation
ILO	International Labour Organisation
ITU	International Telecommunications Union
NGO	Non-Government Organisation (voluntary organisation)
NUS	National University of Samoa (Apia, Western Samoa)
NZ	New Zealand
PAC	Pacific Adventist College (Port Moresby, PNG)
PNG	Papua New Guinea
PPTO	Personnel Planning and Training Office (Cook Islands)
SICHE	Solomon Islands College of Higher Education (Honiara)
SIDT	Solomon Islands Development Trust (Honiara)
SOPAC	South Pacific Applied Geoscience Commission (Suva)
SPC	South Pacific Commission (Noumea, New Caledonia)

SPEC	South Pacific Bureau for Economic Co-operation (1972-89) thereafter known as Forum Secretariat or SPFS
SPFS	South Pacific Forum Secretariat (Suva)
TCSP	Tourism Council of the South Pacific (Suva)
UN	United Nations
UNDP	UN Development Programme
UNESCO	UN Educational, Scientific and Cultural Organisation
UNITECH	Papua New Guinea University of Technology (Lae)
UON	University of the Nations (Kona, Hawaii)
UPNG	University of Papua New Guinea (Port Moresby)
US	United States of America (as an adjective)
USA	United States of America (as a noun)
USP	University of the South Pacific (main campus, Suva)
UWI	University of the West Indies
YWAM	Youth With A Mission

Introduction

This study examines post-secondary education in the South Pacific by surveying the vast number of educational opportunities currently offered by a wide range of institutions, organisations, agencies and countries and by analysing the main trends arising from the survey. It pinpoints a number of crucial policy issues which would seem to require reflection and detailed discussion on the part of all those involved in post-secondary education, whether as policy-makers, donors, providers or receivers.

The book has to be set against a background of revolutionary change in Pacific post-secondary education. Among the causes of this period of change, four main driving forces can be identified. They are:

1 Rising aspirations for higher education and for the better incomes and life-style that are assumed to come from it are pushing Pacific governments into the expansion of educational facilities.

2 Metropolitan governments with interests in the Pacific are offering staff, scholarships, travel and research funds, equipment and construction for an ever widening range of training programmes in the islands and abroad. Almost all government higher education, whether conducted at home or abroad, is funded wholly or partly from abroad – the only region in the world where this is so to such an extent.

3 In the private sector, international firms are adopting patterns of training which have been developed in their home countries.

Most of it is part-time and involves comprehensive in-house courses, plus support for external study.

4 Increasingly students are funding their own education, whether within church-run or government-sponsored institutions, or by enrolling in distance teaching or summer schools.

The demand for higher education will continue to grow. The danger of quality being sacrificed to quantity as the pressures increase is a real one. Cost-effective ways of funding high quality education have to be found.

To grasp the immensity of what is currently happening in post-secondary education it needs to be remembered that not so long ago education beyond the primary level was only for the privileged few. The chapter on **Current Provisions** describes in some detail the widening range of higher education options and the increasing amount of education and training available from outside the formal education sector, not only from employers, governments, international agencies and non-governmental organisations but also through students funding their own study by work/study programmes or by using books, videos, computer software, etc.

The second part of this chapter examines some issues concerning the courses offered in the various institutions, including the selection of subjects, the qualifications to be gained and issues of access.

A case study of Cook Islands and a comparison with Solomon Islands illustrates further some of the major themes which have arisen from the survey of current provisions:

- the increase in post-secondary opportunities offered outside the conventional educational institutions
- some advantages of smallness
- the concentration of educational opportunities in national or regional capitals
- the correlation between a high per capita income and access to educational opportunities
- the advantages of having preferential access to a metropolitan country.

In the chapter on **Trends and Policy Options** a number of policy areas are identified, the first of which is the need for **continuous learning.**

Within the subsequent section on **curriculum issues** questions addressed include: What are the issues involved in giving a greater emphasis on science, maths and technology? How can the desire for a culture-specific curriculum be reconciled with the need for internationally accepted quality?

Moving on to the topic of **qualifications**, a particular focus is given to the international acceptance and marketability of qualifications and the correlation between quality and a country's economic success. The issue of **quality** is given particular attention. The need for **greater mobility** of students and staff is also stressed.

Management options are inextricably involved with a whole complex of issues, including those to do with size, consolidation and decentralisation. How feasible is it for an individual country to set up its own higher education institution, given the constraints of donor priorities and existing regional arrangements? How can countries co-operate while still retaining equity? Can a situation whereby an individual country chooses the most appropriate **mix of national, regional and international educational opportunities** for its people be achieved? Will cultural integrity and self-reliance be impaired by international interaction?

Issues of **equity** are particularly important for those who live far from a national or regional centre, for the disadvantaged and for women, at least in some of the South Pacific islands countries.

Where **finance** is concerned, it has in the past been assumed that cost-effectiveness and economies of scale were closely related. This assumption has to be increasingly questioned, especially in the light of evidence from some apparently cost-effective yet small institutions in the Pacific region. With national governments and donor countries unable to increase expenditure on education, solutions could be sought from integrated work-study programmes or from students funding their own study through distance methods or through books, videos, etc. Making a contribution to the cost of their education appears to heighten students' sense of responsibility.

This chapter closes with a look at the linkages between **post-secondary education and economic development**.

The various themes of this study are finally brought together in a series of recommendations, suggesting action which can take post-secondary education in the South Pacific into the **twenty-first century**.

Note on terminology

Post-secondary

We see a case for the term 'tertiary' to describe that which follows primary and secondary. It is simpler, more logical and broader than such alternatives as 'post-secondary'. Restricting 'tertiary' to selected forms of higher education carries an unnecessary connotation of elitism. But we accept that there is no 'right' term, and as we were asked to write on 'post-secondary' education, we use that term for all forms of education and training undertaken by adults. This study includes learning in all forms of public and private educational institutions, through business and by private study.

Education and training

We prefer not to distinguish between these two terms. There is a tendency for the former to be more prestigious and connote deeper understanding, but in our experience indoctrination is just as common in the social sciences and humanities (which some people regard as 'education' rather than 'training') as in any other field. To the extent that 'education' connotes deeper understanding of principles and processes, we hope to see more of it built into training programmes.

University/college/institute/school

Terminology, even within the English-speaking South Pacific, varies widely. Many courses at post-secondary institutions in the Pacific are at upper secondary level. The difference is often one of age of students, since particularly in countries where high schooling

is limited, many courses for adults must be geared to students who have had little secondary schooling.

Likewise, all universities in the islands teach many courses which would be taught in high schools or colleges in some other parts of the Commonwealth. The mix of degree and non-degree courses is partly because of the limited number of students for degree studies. Partly it was felt that economies of scale were made possible by such expansion. Partly it is an incidental by-product of aid donors wishing to finance a training programme and needing an institution to which to attach it. Also any institution has expansionist ambitions. The term 'university' seems to us sensible for the present Pacific institutions that so describe themselves.

The term 'college' in the US system is often used for institutions whose main task is teaching first (bachelors) degrees. In that sense all South Pacific universities have more in common with US colleges than universities. Pacific universities are more akin to what were called in Australia, Colleges of Advanced Education, but these are now adopting the term 'university'. In the South Pacific, the term 'college' usually implies that the institution offers a limited range of courses, and only teaches first degrees (if it teaches at degree level). The Pacific Adventist College (PAC) and the Divine Word Institute (DWI), both based in Papua New Guinea but accepting students from throughout the Pacific, offer programmes similar to those offered in universities to the bachelor's level, but only in education, commerce, administration and religious studies in both institutions. PAC also offers agriculture and DWI provides courses in communication studies. Neither offer post-graduate courses (nor does the Brigham Young University in Hawaii). In the Pacific context PAC and DWI perhaps should be called universities.

The Solomon Islands College of Higher Education (SICHE) incorporates Schools of Finance and Administration, Education and Cultural Studies, Nursing and Health Studies, Industrial Development (including surveying, construction, mechanics, etc.), Natural Resources, Marine and Fishery Studies, and General Studies. The government has several times indicated its intention to move to degree programmes and rename the institution as a university.

The Fiji College of Higher Education was established in 1992, in the initial stages at least to train secondary teachers. Its functions are expected to expand and it will probably become part of a Fiji national university.

The term 'college' is sometimes used for secondary schools in the Pacific, but more commonly for institutions with a particular focus, such as those for teacher training, nursing, agriculture, forestry, fisheries, theology, commerce, aviation, police studies, etc. We find this the most appropriate use for the term.

'Institute' is used for the Fiji Institute of Technology (FIT) which has similar programmes to those of the Solomon Islands College of Higher Education. The Fiji College of Nursing, however, is not associated with FIT. The Divine Word Institute is a degree/diploma-awarding institution. However, Atenisi, in Tonga, calls its secondary school Atenisi Institute and its degree programme Atenisi University. University of the South Pacific (USP) uses the term 'institute' for specialised centres for research, consulting, short courses, publishing, etc., rather than on regular teaching programmes. The 1989 review of Cook Islands education recommended the establishment of a Cook Islands Institute of Higher Education to incorporate the present teacher training, nursing, technical and other programmes. Its implementation is now being planned.

The Government of Fiji is considering changing the name of FIT to Fiji Polytechnic, and raising some of its courses to degree level. The term 'polytechnic' is new in the region, but Western Samoa has recently decided to upgrade its Technical Institute and rename it as a Polytechnic. This term is widely used elsewhere and seems appropriate for such multi-faceted, technology oriented institutions.

The term 'school' is used by some universities and colleges (e.g. USP and SICHE) for a component division, for example, of social sciences or engineering. Others (e.g. UPNG) use the term 'faculty' for such divisions.

Some countries also use their secondary schools to provide adult education courses after hours. For example, Niue High School in 1990 was offering adults courses in English, Mathematics,

Geography, Art, Technical Drawing, Physics, Biology, Chemistry and Economics. The courses offered were at sixth form level (pre-university), and fees were charged, whereas they are not for secondary school children.

All the above terms have been adopted from other countries, but even in the countries they were borrowed from the meanings keep changing. In the Pacific as elsewhere in the world, the names used are politically sensitive and important.

The region covered

There are several 'regions' in the South Pacific, which are becoming ever more complex and over-lapping. Some regions commonly referred to are:

- the culture areas (Melanesia, Polynesia and Micronesia)
- the area of the South Pacific Commission (the islands nations and territories which come within this are listed in the two boxes below)
- the South Pacific Forum (13 islands states plus Australia and New Zealand for some purposes but not others)
- the University of the South Pacific region (South Pacific Forum countries minus Papua New Guinea, the Federated States of Micronesia, Australia and New Zealand – but plus Tokelau)
- the Asia-Pacific region (this region is important for United Nations agencies, and increasingly for other purposes – it includes all islands except French and American territories plus Asia)
- the Asia-Pacific Economic Co-operation (APEC) region (a new and probably very important grouping involving the major countries of the Pacific Rim plus a single representative of the South Pacific Forum in a limited capacity).

Our terms of reference speak of post-secondary education in the islands of the 'South Pacific (with special reference to Commonwealth countries)'. These are, in order of population:

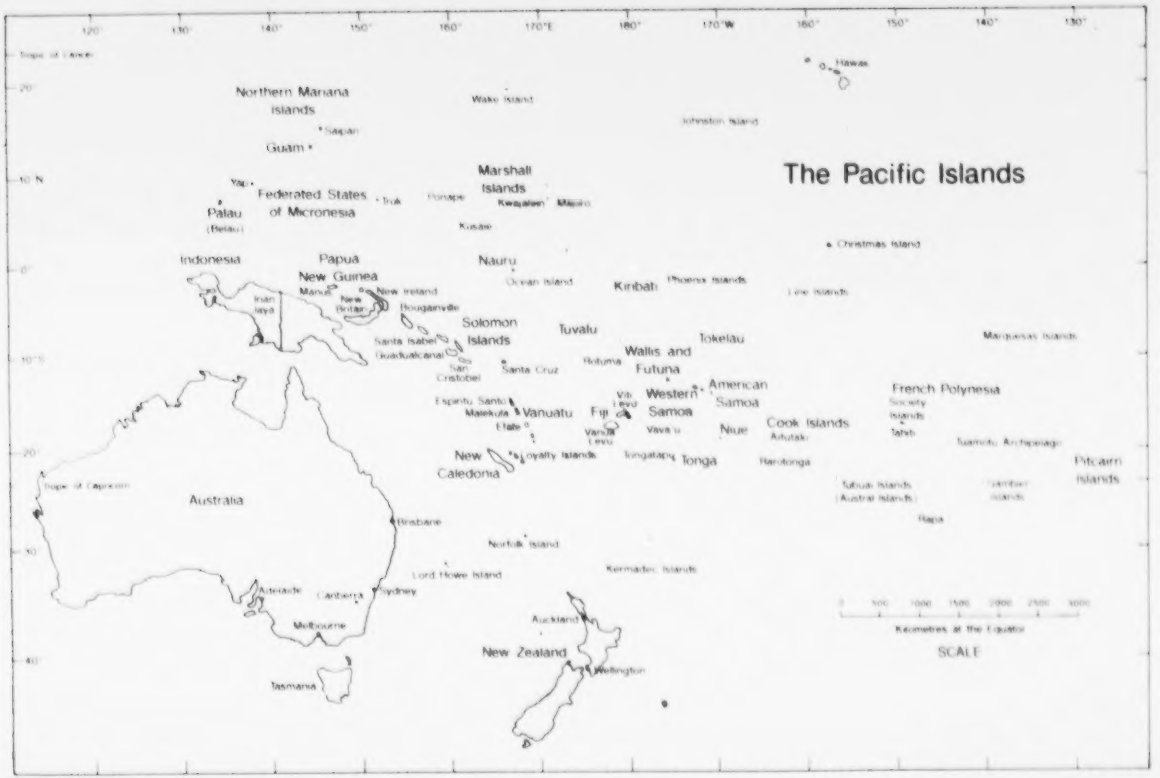
Commonwealth	**Population 1991 (est)**	**Area(sq.km)**	**GNP per person* 1991 US$**
Papua New Guinea	4,013,000	462,243	US$ 820
Solomon Islands	326,000	29,790	560
Western Samoa	168,000	2,934	930
Vanuatu	156,000	11,880	1,120
Tonga	100,000	700	1,100
Kiribati	71,000	720	750
Cook Islands	17,000	240	1,500
Nauru	10,000	21	10,230
Tuvalu	9,000	26	650
Niue	2,000	259	1,330
Norfolk Island	2,000	34	1,500
Tokelau	1,600	10	n.a.
Pitcairn Islands	60	5	n.a.
Non-Commonwealth			
Fiji	751,000	18,272	1,520
French Polynesia	200,000	3,265	7,840
New Caledonia	155,000	19,103	5,760
American Samoa	40,000	197	5,280
Wallis and Futuna	16,000	255	968

* Gross National Product per person per year is only an indicative figure. The figure changes continually. Various agencies and criteria of assessment show different figures.

(Main sources: Basic Statistical Data on Selected Countries with populations of less than 5 million, Commonwealth Secretariat,1993; *Education in Small States*, Bray and Packer, Pergamon 1993)

The countries listed above are the states and territories of the tropical South Pacific, i.e. below the equator and above the Tropic of Capricorn. Several non-Commonwealth entities above the equator belong to the South Pacific Commission, the South Pacific Forum and/or other South Pacific organisations, and are relevant to this report. These include:

	Population 1991 (est)	**Area(sq.km)**	**GNP per person* 1991 US$**
Guam	145,000	549	5,320
Federated States of Micronesia	102,000	701	1,500
Marshall Islands	45,000	180	2,500
Northern Marianas	21,000	471	14,000
Palau	14,000	494	3,000


The Pacific Islands
Northern Mariana Islands
Guam
Saipan
Wake Island
Hawaii
Johnston Island
Marshall Islands
Federated States of Micronesia
Palau
(Belau)
Yap
Truk
Ponape
Kwajalein
Majuro
Kusaie
Christmas Island
Indonesia
Papua New Guinea
Irian Jaya
Manus
New Ireland
New Britain
Bougainville
Nauru
Ocean Island
Kiribati
Phoenix Islands
Line Islands
Solomon Islands
Santa Isabel
Guadalcanal
San Cristobel
Santa Cruz
Tuvalu
Rotuma
Wallis and Futuna
Tokelau
Marquesas Islands
Espiritu Santo
Malekula
Efate
Vanuatu
Fiji
Viti Levu
Vanua Levu
Western Samoa
American Samoa
Niue
Cook Islands
Aitutaki
Rarotonga
Tongatapu
Tonga
Loyalty Islands
New Caledonia
French Polynesia
Society Islands
Tahiti
Tuamotu Archipelago
Pitcairn Islands
Tubuai Islands
Austral Islands
Gambier Islands
Raga
Tropic of Capricorn
Australia
Brisbane
Norfolk Island
Lord Howe Island
Kermadec Islands
Adelaide
Canberra
Sydney
Melbourne
Tasmania
Auckland
New Zealand
Wellington
Kilometres at the Equator
SCALE

New Zealand

New Zealand is smaller in area (268,000 sq.km.) and population (3,400,000) than Papua New Guinea, but larger than the other islands states. New Zealand is the only Commonwealth Pacific islands state outside the tropics: it has a more complex economy, higher educational standards, a predominantly non-indigenous population (nearly 80 per cent European), and its per capita income (about US$8,000) is higher than most. New Zealand interacts a great deal in education with other South Pacific islands. The gap between them in income, education levels, political interests and other factors is narrowing. (The increasingly common political and other interests, including education, are elaborated in Henderson, 1990; Crocombe 1992.)

Hawaii

The other relevant group is Hawaii, whose population of 1,200,000 has about the same 20 per cent Polynesian component as New Zealand. The remainder is mainly Asian, secondly European. Though only one sixteenth the size of New Zealand (16,641 sq.km.), the per capita income is higher at US$14,000. A state of USA, it is a Pacific islands group which interacts a lot with other island groups in education. Commonwealth Pacific countries are making increasing use of Hawaii for post-secondary education.

Fiji

Fiji was a member of the Commonwealth until 1987. It may rejoin, although an official announcement in April 1991 said this is not intended. Fiji became heavily involved in regional post-secondary education while it was a member of the Commonwealth. Had it not been the centre of the United Kingdom's empire in the Pacific, much less would have been concentrated there.

Current Provisions

Introduction

Most Pacific islands countries began formal schooling with educational institutions set up by Christian missions in the nineteenth century. The academic level was generally low and religious instruction took up much of the curriculum. After the establishment of central (in most cases colonial) governments, church schools were supplemented by state schools. Overseas education did not become significant until after World War II, when a system of scholarships was instituted for secondary and tertiary education.

In most cases there was little or no choice. In many countries one was lucky to get to school, and formal learning beyond primary level was for the select few. This has changed radically over the past generation. Today, primary education is available to all in most countries, and the range of secondary and tertiary options keeps widening. Moreover, whereas education was obtainable either at school (or college or university) or by on the job experience, today an increasing proportion is provided through the mass media, through specialised courses offered by employers, governments, international agencies and non-government organisations, and through self-training with books, cassettes, videos and other self-teaching aids. Of that provided by schools, colleges and universities, a rapidly growing proportion is being provided by distance methods.

Political entities and relationships provide the main parameters for educational institutions. They are in part a product of population

and geography, but also of culture and history. For example, Wallis and Futuna are geographically close to Fiji, and culturally close to Tonga and Samoa respectively, but because they were colonies of France, their external orientation for post-secondary education is to New Caledonia, French Polynesia and France. Niue is geographically and culturally closest to Tonga and Samoa, but in post-secondary education has been closest to New Zealand and the Cook Islands because of constitutional connections, and to Fiji because of the existence of regional institutions there. Likewise, American Samoa's post-secondary education is overwhelmingly derived from US sources – both in the territory and externally.

Sources of post-secondary education

This section is concerned with the main sources of post-secondary education available nationally, regionally and internationally.

National provision

Sub-national

The three main factors determining what is done within nations and where, are population, geography and political entity.

POPULATION: PAPUA NEW GUINEA

Most of the people of the South Pacific region are in Papua New Guinea (PNG), a country of four million people. That is 82 per cent of the total population of the Commonwealth tropical Pacific islands, and 65 per cent of all tropical South Pacific islands; or 47 per cent and 42 per cent respectively if New Zealand is included.

With such numbers it is logical to expect many post-secondary facilities to be spread in various parts of PNG, both to be closer to the user population, and to meet the political demand for equity. There would be more facilities, and more spread, were it not that primary and secondary education were late being established (thus restricting the pool of persons available for post-secondary education), per capita incomes are low, and development needs extensive (so that limited funds are available for higher education).

Thus there are about 70 post-secondary institutions in PNG coming within the purview of the Commission for Higher Education, including:

- the government's eight teachers' colleges
- eight technical colleges
- 15 nursing colleges
- seven agriculture, forestry and fisheries colleges
- two paramedical colleges
- four administrative, legal and related colleges
- two universities (spread over four campuses)
- one defence college, one maritime college, one police college, one civil aviation college
- eight private colleges – most of them associated with churches
- and various others. (Lynch 1988).

In addition there are many institutions for adult training and many short courses (particularly rural development oriented) which do not come within the purview of the Commission for Higher Education. Education provided by private organisations, particularly church-related ones, is spread because different churches tend to have established 'spheres of influence' in different parts of the country. The big mining companies and many other major firms have substantial educational programmes for their staff, and in some cases for the community in which they operate.

Some of the PNG institutions draw students from throughout the nation, others have varying degrees of geographical focus.

GEOGRAPHY: TUVALU

Geography can necessitate locational distribution to an extent that would not be undertaken on a population basis alone. Thus even a nation such as Tuvalu, with a total population of less than 10,000, has run short courses for adults on various of its isolated islands because it is cheaper to send training staff out than to bring students in. It probably also makes better social sense for many courses. Moreover, each island wants to be the locale for some activity.

LOCAL POLITICAL ENTITIES: PNG, SOLOMON ISLANDS AND KIRIBATI

Local political units are most significant for post-secondary education in Papua New Guinea and Solomon Islands, where provincial governments have some educational responsibilities and apply political pressure to obtain better distribution of the central government's facilities. In Kiribati, island councils are the critical units for some forms of adult education, as islands are for the allocation of scholarships.

Small political entitities, whether provincial, territorial or national, help to get more education to the people than would otherwise be available.

National

There is a general preference everywhere to keep facilities within the nation, but there are limits to what is feasible. The minimum numbers can be quite small, but whether a nation can maintain its own post-secondary institutions depends on circumstances, as the following examples illustrate.

THE SMALLEST STATES

Tokelau

With a total population of 1,700 spread over three islands with infrequent transport between them, Tokelau has no national post-secondary institution, though it has at times had expatriate educators with additional responsibility to provide in-service training to primary teachers, and some University of the South Pacific extension courses are taken (mainly by teachers). For primary teacher training, Tokelauans use the Western Samoa Teachers' College, as the Samoan language and culture are related to Tokelauan, and Samoa is the closest facility. Tokelau also uses other secondary and post-secondary facilities in Samoa, as well as secondary facilities in Niue. For a time it used the Cook Islands Primary Teachers' College. But mostly, New Zealand facilities are used as Tokelauans have free entry to New Zealand, and more Tokelauans live in New Zealand than in Tokelau.

Niue

With a declining national population of only about 2,100, all on one island, Niue is the smallest national government in the world. Yet for many years Niue maintained its own primary teachers college (operated in conjunction with the secondary and primary schools) because Niuean language and culture are unique, and the country is relatively isolated. However, the college closed as emigration resulted in there being six times more Niueans in New Zealand and Australia than in Niue. The main established post-secondary services are a limited apprenticeship training programme and some training of nurses. There are also some courses taught from Fiji through the USP Extension Centre. Niue's main source of post-secondary education is New Zealand, as like Tokelau and the Cook Islands, Niueans have free access to New Zealand. Fiji-based institutions are also used for some services.

The Cook Islands

With a national population of 17,500, the Cook Islands still operates its own primary teachers college because it is a unique language, culture and nation. For several years it was closed and New Zealand colleges were used. They still are for secondary training and for some specialised courses, but government policy is that the national college is the best source for the majority. After a period of service, those who have performed well both academically and in the classroom are sent abroad for further training.

Nurses are trained nationally, as are apprentices in a range of fields, the latter with assistance from the International Labour Organisation. Airline pilots are trained partly in-country and partly in New Zealand, and a range of other post-secondary services are offered. In addition, the USP extension centre offers credit courses from Suva and continuing education (i.e. non-credit) courses taught locally. Massey University and the Open Polytechnic in New Zealand also offer some courses by extension.

LARGER PACIFIC COUNTRIES

Each of the larger countries has its own institutions for teacher training, nursing, technical, theological and in some cases other

forms of training, such as marine, agriculture or rural development. How many others depends not only on size, need or levels of education, but often more importantly, on what aid donors are prepared to finance and where, as most of the infrastructure for post-secondary education, and some of the operating resources, are provided under aid.

PNG and Fiji, being larger, have a wider range. UPNG and UNITECH are both national universities of PNG (with its population of 4 million), but the former has three campuses. To add to the post-secondary facilities available in Fiji, in July 1990 a group of ten Fiji Indian educational and religious organisations decided to plan a university, beginning with pre-university courses. How soon this will materialise is not known, but it would be surprising if a country of this size and in this context did not establish a private university in the 1990s.

The larger countries of the University of the South Pacific (USP) region, once independent, have tried to develop their own tertiary institutions nationally. This, however, has been constrained by the decision of the former colonial powers and current aid suppliers to channel resources to one centre for the whole region, usually Suva in Fiji. The metropolitan powers and the institutions they established have strongly resisted national efforts to set up separate facilities. They declined to allow funds given on behalf of those nations to regional institutions to be used nationally instead. The donors compromised a little after Samoa established the National University of Samoa despite very strong external pressure not to do so, by limited facilitation of national community colleges such as the Solomon Islands College of Higher Education and the Community College of Tonga, provided they remained below university level. An Institute of Higher Education is proposed for the Cook Islands, and the technical institute in Vanuatu provides some similar facilities.

But size is far from the only factor. Money is often even more important, as is illustrated by the extensive range of post-secondary educational institutions and opportunities in Guam and Tahiti, despite small populations.

Regional provision

The term regional is widely used but has a range of different connotations.

Culture areas

If by this term we refer to the conventional classifications of Melanesia, Polynesia and Micronesia, several institutions have a primary focus on one or the other. The geographical and culture areas are broadly conterminous, but in all cases there is a cultural element, sometimes quite prominent.

MICRONESIA

The following serve mainly Micronesia:

- The University of Guam: established as a post-secondary college in 1952, but offering degree courses to students throughout Micronesia from 1963, and now offering some programmes in other parts of Micronesia
- The College of Micronesia
- The Community College of Micronesia: mainly in Pohnpei, but with facilities in Palau and Marshall Islands also
- The Micronesia Medical Training Programme: based in Pohnpei
- The Micronesian Area Research Centre: Guam
- The Center for Pacific Arts and Cultures: based in Hawaii
- The Center for Advancement of Pacific Education or CAPE: based in Hawaii.

POLYNESIA

The following institutions focus on Polynesia:

- The Polynesian Cultural Center is associated with the Brigham Young University (BYU) in Hawaii and provides practical training, as well as funding, for about 400 Polynesian students at the university.
- The Institute of Polynesian Studies is also at BYU.

• The Council on Pacific Education (COPE), with headquarters in Hawaii, and funded by US and Japanese sources, at present serves the Polynesian region of the South Pacific through the South Pacific Education Consortium, which is centred on the Community College of American Samoa. It provides supplementary assistance with tertiary education in computing, mathematics, telecommunications and other technologically oriented studies. It also provides for a limited amount of specialisation by Polynesian institutions for other countries in the consortium (Tonga and Western Samoa).

MELANESIA

There are few specifically Melanesia-based institutions, but the Papua New Guinea University of Technology (known as UNITECH) in practice operates as a regional institution for Solomon Islands and Vanuatu as well as Papua New Guinea. The Faculty of Law of the University of Papua New Guinea likewise caters for the same region. However, the decision of the University of the South Pacific to set up a Law Faculty in Vanuatu will presumably reduce UPNG's role in this field. Both aimed to serve the islands as a whole, but this has not succeeded for reasons discussed below.

The Melanesian Institute for Pastoral and Socio-Economic Service of the Melanesian Conference of Churches, based at Goroka in Papua New Guinea, runs short courses in various places to orient and upgrade church personnel in pastoral, teaching, counselling, cultural and other studies.

Considerable research and publication is undertaken on Melanesian cultures. The Melanesian Spearhead Group – the annual meeting of Prime Ministers of Papua New Guinea, Solomon Islands and Vanuatu (and from 1990 the leader of the independence movement in New Caledonia) are looking into more joint provision of higher education for their region. There is a good case for it, but the main external funding sources oppose it as it is not in line with their political priorities.

The historical inheritance

The former British territories were Fiji, Solomon Islands, Vanuatu (then New Hebrides), Kiribati and Tuvalu (then the Gilbert and

Ellice Islands Colony), Nauru (then a joint UK/Australia/NZ trusteeship), Tonga (then a protectorate) and Pitcairn. The United Kingdom set up several educational institutions to serve this region. In some cases this was done in association with New Zealand in relation to its former territories (Western Samoa, the Cook Islands, Niue and Tokelau), though they also continue to use facilities in New Zealand and beyond.

Institutions in this category include:

- The Central Medical School (renamed the Fiji School of Medicine when taken over by the Fiji government) was established in 1928 by the Rockefeller Foundation for the whole Pacific Islands region and subsequently financed by that and other foundations, governments, the World Health Organisation and others.
- The Derrick Technical Institute (now the Fiji Institute of Technology – FIT) was established by the United Kingdom in the 1950s for all UK territories in the region.
- The University of the South Pacific (USP), was set up in 1968 by the United Kingdom and New Zealand for their then territories (Cook Islands, Fiji, Kiribati, Nauru, Niue, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and the former territory of Western Samoa). The Marshall Islands joined USP in 1990, and the Federated States of Micronesia may do so. This gives a total population of 1.5 million. With Fiji's withdrawal from the Commonwealth in 1987 and Marshall Islands membership, over half of the people of the USP region are no longer in the Commonwealth.

UNIVERSITY OF THE SOUTH PACIFIC

USP offers a wide range of courses through its four Schools of Agriculture, Humanities, Pure and Applied Sciences, and Social and Economic Development. It also provides an extensive range of services through a series of nine institutes, and through extension services. All capital works and significant contributions to its continuing operation have been paid by donor governments and international agencies.

In the mid 1970s, under the leadership of Vice-Chancellor James Maraj, decentralisation began with the South Pacific Regional College of Agriculture in Samoa becoming the Alafua Campus of USP. It teaches diploma and degree courses in agriculture. Proposals to establish other subjects there were not proceeded with after Maraj's departure. Institutes were established in Tonga (Rural Development), Samoa (Agriculture), Vanuatu (Law and Pacific languages) and an Atoll Research Unit was established in Kiribati.

A decision to establish a campus in Solomon Islands was delayed by the Solomon Islands government's rejection of the person appointed to head it, and plans for a campus in Tonga were put on hold when the person selected to head it died suddenly. The Solomon Islands government later decided that as it had received a very small share of the benefits from the Suva campus, a campus on its soil controlled from Fiji would not be in its best interests. It stated that it would establish a national university as soon as possible – a policy opposed by the aid donors who had paid for all buildings' funds in Suva. A change of campus leadership from the early 1980s led to renewed emphasis on centralisation on Suva.

Student numbers in 1990 were 869 in pre-degree and sub-degree programmes on the Suva campus and 89 on the Alafua (agriculture) campus; and 1,458 in degree programmes on the Suva campus and 61 at Alafua. There were 6,451 extension students, taking one course at a time by distance, or a full-time equivalent of about 1,600. Most students of all categories are from Fiji, with the exception of the Samoa campus where most are from Samoa.

With the exception of Fiji, most of the countries using the above institutions use others elsewhere for more of their students, for example: from Cook Islands, Niue, Tokelau, Western Samoa, Tonga and Nauru most go to New Zealand and Australia, or to local institutions; Marshall Islands has most in USA; Solomon Islands had students in both USP and UPNG as well as Australia and New Zealand, but with law and order problems in PNG the number there has come down.

Most of the students from other islands using the Fiji-based facilities do so because of scholarships provided by countries outside the region.

Commonwealth South Pacific

It has long been suggested that the Commonwealth Pacific Islands should operate as a unit for specialised higher education. The Central Medical School, set up in Suva in 1928 by the Rockefeller Foundation for the whole South Pacific, was the first institution intended to serve this unit. PNG withdrew and set up its own medical school. About 75 per cent of students used to be from islands other than Fiji, but by 1990 only 22 per cent were. Even those, in many cases, would have preferred metropolitan institutions, but are tied by World Health Organisation scholarships to institutions in the islands.

Many felt that there was a need for only one Faculty of Law, and that as the University of Papua New Guinea was the first to establish one, it should be used by the region as a whole. The same was suggested for the School of Engineering at the Papua New Guinea University of Technology. Neither has achieved a regional role beyond Melanesia, despite the universities concerned and the Government of Papua New Guinea welcoming the idea. Neither, however, was prepared to offer the structural changes (including participation of other country representatives on the university councils) that might have made such possibilities into realities.

The South Pacific Regional Telecommunications College was set up in Suva by the United Nations Development Programme, the International Telecommunications Union and the European Community for the region. The Fiji government later insisted on taking it over. It accepts students from all South Pacific Forum countries, but not to the extent originally planned. Some training is done nationally, and some at other centres in the region and beyond.

If we look at the whole Commonwealth South Pacific (including Australia and New Zealand), the only educational institution to serve it is the Commonwealth Youth Programme, which is located in Fiji

but relocation to Solomon Islands is planned. Though most of its students come from the tropical Commonwealth Pacific, it also has some from Australia and New Zealand. This has been a successful programme, and provides a model for other programmes which might be adopted, with the headquarters of each distributed in various Commonwealth Pacific countries, but drawing students from all.

The Oceania Olympic Committees and the various Oceania sports codes associations, each of which includes all the Commonwealth countries in their membership, spread their headquarters and activities. The Olympic Movement supplies funds for high-level trainers from abroad, and for sending Pacific people abroad to places such as the Australian Institute of Sport for training to degree level.

Though it is not their primary role, many institutions in New Zealand have students from all Pacific Islands countries. For example the University of Auckland (only one of seven universities in New Zealand) has more students from the Polynesian states (1,104 non-Maori Polynesians in 1991) than any islands university. It also has 126 Melanesians and 3 Micronesians. These numbers include both those who live in New Zealand and those who go there specifically for education. There are also 25 polytechnics in New Zealand which also cater for many Pacific students: it is estimated that about 6,000 Pacific Islanders attend the polytechnics and other tertiary colleges in the Auckland region alone. It is too early to say whether the first private university in New Zealand, the Asia Pacific International University, will attract many students from the islands.

Australia has more extensive facilities for tertiary education than New Zealand. Fewer Pacific islanders attend them, but the number is increasing and it is expected to continue to do so.

Courses are offered to students in various islands countries through distance methods by:

- The University of the South Pacific from its main campus in Fiji
- The Pacific Adventist College in Papua New Guinea
- Massey University and the Open Polytechnic in New Zealand
- The University of Southern Queensland and several other universities and colleges in Australia.

The University of Papua New Guinea offers extension courses only within the nation.

South Pacific Forum

The Commonwealth Pacific had the same membership as the South Pacific Forum region until Fiji left the Commonwealth in 1987, and the Marshall Islands and the Federated States of Micronesia joined the Forum. Palau plans to join the Forum as soon as it achieves republican status. The last three are not in the South Pacific (being north of the equator), have no association with the Commonwealth, and the overwhelming majority of their students go to USA, and the next largest number are educated in Micronesia. Nevertheless, they will also participate in post-secondary institutions in the South Pacific. There may also be some use of facilities in Micronesia, especially in Guam and Pohnpei, by countries south of the equator. Facilities in Hawaii are already extensively used.

Now that the independence movement in New Caledonia has been accepted as a full member of the Melanesian Spearhead Group, it plans to reapply for observer status in the South Pacific Forum immediately, and full membership on independence. Moreover, New Zealand has recommended a special observer status for New Caledonia and other territories that may become independent, and also that it establish a fund for training Kanak students in Forum countries. Small numbers have been trained at the University of the South Pacific, the University of Papua New Guinea and New Zealand and Australian universities, as well as at the Solomon Islands College of Higher Education and at institutions in Vanuatu. The number is likely to increase, but not greatly.

Pacific Islands with Developing Country status

SOUTH PACIFIC COMMISSION (SPC)

For all Pacific islands countries with developing country status the South Pacific Commission is the main regional institution with educational responsibilities. It provides applied courses in particular fields: a one-year diploma in community development; a one-year

diploma in youth leadership; and various short courses in production of audio-visual materials, radio broadcasting, aspects of tropical agriculture, and so on. Some of these courses are held at the SPC offices in Fiji or New Caledonia and others in various countries of the region.

THE PACIFIC ADVENTIST COLLEGE
This is primarily (but not exclusively) for SDA adherents, but takes students from throughout the region both on campus and by extension.

A number of United Nations agencies offer courses at this level (see below).

International provision

The Commonwealth

The Commonwealth Pacific countries north of the equator have had little educational contact with the Commonwealth islands states. Canada supplies some scholarships for islanders to attend islands institutions (and a few to attend Canadian institutions) and has been a major source of funds and staff for marine training.

Singapore has been the focus for some specialised training, for example in aviation, but there has been little interaction with Malaysia or Hong Kong.

In the 1970s India gave some scholarships to students of all Commonwealth islands states for post-graduate training in India, but the living and other conditions were not as attractive as those available in other countries. India is now little used for higher education by other than Fiji Indian students, who go to India as private students more than to any other country.

Malaysia began in the late 1980s to take a closer interest in the Pacific Islands, particularly Fiji. This has not yet manifested itself in much educational interaction.

The United Kingdom remains a significant source, both through contributions to institutions in the islands, and through scholarships to the United Kingdom.

In the 1970s it was expected that there would be considerable interaction in higher education between the Pacific Islands and the Caribbean. Contacts between USP and The University of the West Indies (UWI) included familiarisation visits for staff, use of UWI external assessors, the UWI Vice-Chancellor on the USP Council, experiments with post-graduate education and so on. These moves were welcomed by both sides, but were not sustained because of high costs, the great distances involved and, most importantly, because neither can finance the other.

The most spectacular recent educational development in the Commonwealth is the Commonwealth of Learning, established in Vancouver in 1988, to facilitate co-operation among Commonwealth countries throughout the world. Its mandate is to serve all categories of adult ('post-school age') students, irrespective of level or kind of institution. The ultimate goal is for any person in any Commonwealth country to be able to take any course available by distance methods from any university, institute or college in the Commonwealth (already over 400 such institutions offer courses by these methods). In practice, however, the main co-operation through COL for the South Pacific for the foreseeable future is likely to be with Commonwealth nations of the Pacific Basin, including Australia and New Zealand, Canada, Singapore, Hong Kong, Malaysia and Brunei Darussalam (a major funding source for COL in the first five years of its existence).

Asia/Pacific

This region, created by the United Nations, includes all Pacific Islands states, Australia and New Zealand, and all states of Asia as far west as Pakistan. There was no regional interaction there until United Nations activity became significant in the 1970s. Now over 40 United Nations agencies, and some others, designate this region as their operating area. Most of them undertake education and training, in most cases short applied courses. Some are carried out in Asia for people from the whole Asia/Pacific region, but most are carried out within the Pacific Islands or the South Pacific Forum countries (i.e. including Australia and New Zealand) for this part of

their region. Most long courses financed by such agencies are carried out wholly or partly by a university or other institution.

Nowhere else in the world is such a high proportion of post-secondary education and training carried out by international agencies. This is because the primary unit of participation is the nation, and thus the agencies feel obliged to do some training for each nation. For example, in 1989 the Asia Pacific Development Centre, based in Kuala Lumpur, ran a highly successful intensive seminar for the Cook Islands government. In no other country has such a high proportion of the population been involved in an internationally run seminar financed by APDC. That one was only for Cook Islanders, but at the same time there were three unrelated short-term regional training programmes being run by different international agencies in the Cook Islands, with its national population of 17,500: an illustration of one of the many advantages of smallness.

The only university set up for this region was the Pacific and Asia Christian University established in Hawaii in the mid 1980s. It soon changed its name to University of the Nations, with a network of campuses around the world, aiming at unlimited international coverage. A number of Pacific Islanders attend the Hawaii campus, and a campus is planned for Tonga.

United States of America

USA has been the only source of post-secondary education for American Samoa and the Micronesian territories of the north Pacific. Much of this is done in USA, and that conducted in the islands is substantially staffed and funded by USA. The main post-secondary institutions are the Community College of the Northern Marianas, the American Samoa Community College, the College of Micronesia (the last set up by the US administration but since taken over by the self-governing states, particularly FSM), and the Community College of the Marshall Islands. The University of Guam also teaches some hundreds of Micronesian students, mainly for degree courses.

In 1991 USA began a new Pacific Islands Training Initiative to provide practical training, mainly through short courses, in such subjects as financial management, accounting, audit and computing.

Hawaii

Hawaii is home to an enormous range of post-secondary institutions, vastly more than anywhere else in the Pacific Islands, despite Hawaii having less than a third of the population of Papua New Guinea or New Zealand, and about one third more than Fiji.

Most Pacific Islands students are attracted to church-related universities in Hawaii. There are about 300 (not including Polynesian Hawaiians) at the Brigham Young University, which is sponsored by the Church of Jesus Christ of Latter Day Saints (Mormon). Smaller numbers attend Chaminade (Catholic), University of the Nations (YWAM), Hawaii Loa (United Church – but now operating in association with Hawaii Pacific University which is not church related). Others attend Loma Linda (SDA) in California and institutions elsewhere on the mainland.

Most of the students at the church related universities take business studies or the liberal arts with relatively few in science courses. But Hawaii is also a centre for theological education, including Fuller Theological Seminary, The International College and Graduate School of Theology, Wayland Baptist University, and Redemption College – in Honolulu alone.

Of Hawaii's many secular institutions, the largest is the University of Hawaii, with 25,000 students. A state government institution, it is popular with Pacific Islands students. Fees vary, being lowest for persons classified as Residents of the State, higher for other Americans, and highest for foreign students. Pacific Islands students from countries with no university campus, however, pay only the minimum rate. The University of Hawaii has a full campus at Hilo, and six community colleges (which teach mainly two-year associate degrees) spread throughout the state.

Then there is a range of private universities. Hawaii Pacific, with 8,000 students, is the largest. Several US mainland universities have campuses in Honolulu. Some began by catering to the many US military personnel based in Hawaii, but they later accepted civilian students. Branches of mainland universities (i.e accredited degree awarding institutions) include University of Southern California, University of Oklahoma, Central Michigan University, Embry-

Riddle Aeronautical University, Kennedy Western University, Central Texas College, Denver Business College, DeVry Institute of Technology and Business, and New York Technical Institute.

Other tertiary institutions in Hawaii include Canon's Business College, Columbia School of Broadcasting, Forest Institute of Professional Psychology, Global Performing Arts Institute, Golden State University, Honolulu Film Actors Workshop, Hawaii Business College, Intercultural Communications Institute, Japan-America Institute of Management Science, Kahumana Center for Alternative Education, Pacific International Language School, and Waianae Educational Learning Laboratory for Adults.

Many other institutions are oriented primarily to particular ethnic or other communities, such as Tokai University (a Hawaii campus of the largest university in Japan), Tokyo Honolulu International College, Kansai Gaidai Hawaii Ko, Kanazawa Institute of Technology, and many others.

Specialised institutions include School to Work Transition Centers, Community Schools for Adults, a number of computing and electronic colleges, language schools, para-legal training schools, sports training colleges, schools for training in art, aviation, beauty care, broadcasting, ceramics, dancing, drama, dressmaking, marine training, marketing, modelling, music, nursing and other health services, real estate training, travel and tourism.

The above list of institutions indicates the tremendous education and training opportunities in Hawaii. The main problem is cost since most Pacific students have to obtain sponsorship of some kind for overseas study. For those who wish to work their way through a course of study, no work permits are needed for students from American Samoa, Guam, Northern Marianas, Palau, Federated States of Micronesia, and the Marshall Islands. For others, work permits are possible, but not easy to obtain except in established programmes such as that at the Brigham Young University which involves a work-study scheme for all Pacific Islands students. Nevertheless, a number of students from Commonwealth South Pacific countries have found their way to Hawaii and studied there – especially in industrial, technical and

trade schools, but also in the universities.

Hawaii is an appropriate place to prepare students of the Pacific Islands for the twenty-first century, when the major influences on the region will be coming from the north Pacific Rim countries. Asians are the largest ingredient of Hawaii's population, and its institutions are geared to Asia as well as USA: the two areas of greatest relevance. It also has a large Pacific Islands population. Overall, Hawaii has more of the needed ingredients than any other single location – though the Pacific of tomorrow will need to have different students familiar with many locations.

California is the other state which is host to a number of South Pacific students, though small numbers are spread throughout USA.

Only in a few cases is it possible for South Pacific students to take distance courses from US universities. The Honolulu University of Arts, Sciences and Humanities is one of the few at that level which offers degree courses by extension, though a number do from the US mainland.

Another issue to be considered with all US institutions is that the quality ranges from very high to very low. The open market in education makes a tremendous range available, but standardisation is not a goal. At present students from Commonwealth Pacific countries lack information on the levels and comparability of each institution of learning in Hawaii and elsewhere in USA.

The US government funds some staff, scholarships, equipment and materials for USP (particularly for its agriculture campus in Western Samoa), National University of Samoa, Atenisi and UPNG, and provides some scholarships for islanders to study in USA. It also provided the PEACESAT educational satellite service, COPE (a network at present used by Polynesian countries), and several other services.

Asia

Until recent years very few Pacific Islands students went to Asia for education. The numbers are increasing, however, with Japan, China and Taiwan being the main hosts. There is likely to be a

continuing increase. In 1988 Japan accepted 268 trainees from the Pacific Islands and sent 299 Japanese experts and survey teams, as well as 266 volunteers of the official JOCV, many of whom are educators – especially in technical fields (Numata, 1990 p.11). Japan is likely to provide considerably more higher education to islands students in the coming decade, with China and other East Asian states increasing their provision a little later.

The Philippines has been significant in some sectors. For example, the United Nations Food and Agriculture Organisation has sponsored a number of South Pacific students for studies in veterinary science, agriculture and related topics, to the University of the Philippines (UP) Los Banos campus. UP has a good reputation for business studies and social sciences, but it is apparently not well equipped for the pure and applied sciences.

Saint Andrews University, originally set up by the Episcopalian Church, has attracted a number of Tongans particularly, for a range of courses. Ateneo University, University of Santo Tomas and the SVD University have attracted a number of Catholic students from the Pacific for various programmes. There is an enormous range of educational establishments in the Philippines. The advantages of the Philippines for Pacific Islands students are that the teaching is in English and the costs are the lowest of any source of higher education. Philippines languages belong to the same Austronesian family as most Pacific Islands languages, and the cultures have consequent similarities.

The quality of courses offered in the Philippines is variable so it is necessary to check the standing of the institutions; Philippines embassies provide this kind of information. Since an increasing proportion of Pacific students will have to finance their own studies abroad in the future, the Philippines is likely to become an increasing source.

Europe

The main sources are UK universities, polytechnics and specialised colleges. France takes well over 1,000 students from its Pacific territories, despite their total population being less than half a million.

But few go to France from other islands states. Small numbers have gone for short courses or post-graduate degrees to Germany, the Netherlands, Italy, Sweden and elsewhere. Specialised institutions such as the World Maritime University in Sweden have attracted a number of Pacific Islanders involved in shipping.

Latin America

Latin America is just beginning to make contact, with some examples of fisheries training for islanders in Chile and Peru, and diplomatic training in Chile. This is expected to grow, but not to be a major source, because of language differences and financial constraints.

To sum up, there has been a remarkable growth in the volume and range of post-secondary education available to Pacific people. In an increasingly inter-connected world, however, we must note that it has grown even faster in many of the countries with which the Pacific islands interacts. Thus, despite the growth, the gap in educated manpower between Pacific islands and Pacific rim countries continues to widen, particularly in respect of the Asian nations of the Pacific Rim.

Modes of learning

Distance learning

Extension teaching was begun by Massey University for the eastern Pacific and the University of Queensland in the western Pacific. Both greatly reduced their involvement at the request of the University of Papua New Guinea and the University of the South Pacific when those two universities began in 1966 and 1968 respectively.

USP AND UPNG
USP has extension centres in 11 of the 12 member countries. UPNG has 11 extension centres, and aims to have one in each of the 19 provincial capitals.

Although UPNG and USP were intended to begin extension studies very early, the main constraint in both cases was that many academic staff regarded teaching by extension as inferior, as an extra, or as a lower priority, despite instructions of the two university councils to the contrary (a phenomenon which has been observed world-wide). However, though the delays were greater at UPNG (Van Trease, 1991), by the 1980s both were offering an expanding range of courses.

In 1989, USP had 6,648 enrolments for credit courses by extension. UPNG had 29 per cent fewer enrolments at 4,710, though by 1992 it had reached 7,600. (The number of students is lower than the number of enrolments in both cases as some students take more than one course at a time). USP offered many more credit courses by extension than UPNG (137 as against 28) in 1991, but to smaller numbers in each course (about 50 students per course for USP, and about 170 for UPNG). UPNG could increase its enrolments as the demand is 'huge' (Van Trease, 1991 p.8), and PNG's population is 2.5 times larger than that of the USP region.

In both cases more students study by extension than on campuses, though as most extension students take only one or two courses at a time, campus teaching is still the larger part of the two universities' operations. The extension proportion continues to grow in both cases, and is likely to surpass the campus mode.

At both universities, most of the courses offered are at relatively basic levels, the more so at UPNG owing to its later start. Thus in 1991, USP was offering 76 courses below degree level and 61 at degree level. The enrolments in most USP member countries are much higher in the pre-degree courses, for example, in the Cook Islands and Solomon Islands in 1991, only 12 per cent and 22 per cent respectively of extension credit course enrolments were at degree level. At UPNG relatively few courses are offered at degree level. The range is expanding in both systems, but it is likely to be some years before full degrees will be available by extension in either.

Almost all credit course teaching by extension is done from the main campuses in Suva (Fiji) and Port Moresby (PNG) respectively.

The technology allows courses to be taught equally well from any point in the system for it depends on satellite communication, in which cost does not change with distance. However, the larger written component depends on mail or courier services. The fact that these operate only once a week from national capitals to the main campus, and take time to be cleared through customs and sorted and delivered to staff, makes for serious delays for students at national capitals, but for almost impossible delays for those on outer islands where most Pacific islanders live.

Technology makes decentralisation possible, but neither system has used that potential except marginally, so distance teaching has in fact intensified the centralisation. With few exceptions (e.g. courses taught regionally from Vanuatu), staff teaching extension courses to the whole USP region are Fiji citizens or expatriates living in Fiji: where the 1991 USP extension handbooks list the names of teaching staff, 90 per cent of the regional staff were Fiji citizens.

Both cases illustrate the drawing of benefits to the centre at the expense of the larger periphery. Thus at UPNG, 30 per cent of extension enrolments are from the National Capital District which contains only 3 per cent of the national population. That population, however, is widely representative of the nation as a whole and mobility is free. Though Fiji has more extension enrolments than the rest of the region, the Suva population is not at all representative of the region, and mobility for citizens of other member countries is tightly constrained.

Another distinction in benefits is that in PNG, while the main campus which was paid for with national funds is used for the students in the capital, the provincial centres had to be paid for by the provincial governments. In the USP region, each country had to pay for the USP extension centre from its own national or bilateral funds. The host country is the only country which declined to finance the establishment of its national extension centre, despite being the main beneficiary. The advantage of the separate nations having financed their own USP extension centres is that this may facilitate their eventual liberation from a centre-dominated and

centre-benefitting system, and a movement towards a networking of autonomous national units.

THE COMMONWEALTH OF LEARNING (COL)
This aims to facilitate the interaction of distance teaching at all levels throughout the Commonwealth (see page 25). Eventually it should be possible to stay in one place but take a degree or other qualification combining selected courses from universities in different parts of the Commonwealth. In the short term, however, COL is facilitating training, cross-fertilisation between distance education systems, and the exchange of courses between institutions.

THE PACIFIC ADVENTIST COLLEGE
PAC also operates an extension system. It is as yet small, involving only 300 students spread across the Pacific from Papua New Guinea to Tahiti. It aims to establish extension centres across the region, but firstly in Solomon Islands, Vanuatu, Kiribati and other parts of PNG.

The only other distance education services are those provided by churches on religious topics and by commercial colleges.

OTHER RELIGIOUS ORGANISATIONS
Several religious organisations (mostly fundamentalist Christian but also some non-Christian faiths) offer Bible Studies and other religious courses by extension throughout the Pacific. We have been surprised to find that more Pacific Islanders are enrolled in such religious training courses (though most are short courses), than in all extension courses provided by the universities put together. For example, the South Pacific Bible College in Tauranga, New Zealand, reported in 1990 that they had over 5,000 students in correspondence courses from the islands, and a Churches of Christ subsidiary in American Samoa claimed similar numbers in the South Pacific. There are many others.

Summer schools

The term 'summer schools' is used here rather than the UPNG term 'Lahara Sessions' because it is better known internationally. It

is also the term used at USP. The basic idea is a short, full-time concentrated session, usually lasting four to six weeks, in which students take a single credit course (occasionally two). Both USP and UPNG report higher pass rates at summer schools than in distance teaching or in on-campus courses. Both authors have been extensively involved with distance teaching and with summer schools and feel that latter could most usefully be expanded. It also provides a face to face learning opportunity for extension students in their home countries.

Many academics in universities on the Pacific Rim have offered to teach summer schools for USP free or at minimal cost, but the bureaucratic complexities led to the stalling of such initiatives more than ten years ago. If each national extension centre had the authority to make such arrangements on its own, much more could be achieved for the non-campus countries.

International agencies

An area of rapid growth in education and training is that provided by the international agencies. This is usually designed for particular categories of experienced professionals to upgrade their skills or acquaint them with new areas of expertise. While training programmes are listed here under the agency which is the main sponsor, many are offered jointly by several organisations, including the host government or institution. It is important to go into some detail about these programmes, as many of them are not taught in institutions, but serve the ever-widening range of specialised needs. They provide a much higher proportion of the post-secondary education and training in the region than is generally understood.

Asian Development Bank (ADB)

This agency conducts courses in the region every year, the most significant being the two week Regional Seminar on Project Appraisal and Supervision (for development banks) and Project Management Seminars. About 30 participants from member countries attend each course. In addition, the Bank operates the ADB/Japan Scholarship Programme for post-graduate study, and

the ADB/ILO Scholarship Programme, usually for courses of about six months. ADB has a South Pacific Office in Vila, Vanuatu.

ESCAP Pacific Operations Centre (EPOC)

Also based in Vila, in 1990 EPOC conducted the following programmes:

- a two week training workshop for 25 officials in preparing municipal plans in FSM
- a one week workshop for 20 persons on development budgeting in the Marshall Islands
- a two week seminar for 25 project planners from the four Least Developed Pacific Countries
- a two week workshop for 30 persons on management of women's centres for the smaller island countries
- a one week workshop on food processing for 20 persons from the smaller island countries.

A total of 129 persons, in addition to those trained by EPOC staff or sent by EPOC on individual study programmes.

The European Community (EC)

The European Community finances nine regional research and training programmes through USP alone for agriculture, and a range of other training programmes through national governments and regional agencies. The EC maintains offices in Papua New Guinea and Fiji.

The UN Food and Agriculture Organisation (FAO)

Operating from a regional headquarters in Western Samoa, the FAO sees all its activities as technology transfer. There is, therefore, a major component of education and training in its programmes in agriculture, aquaculture, marine resources, boat building, forestry, pest and disease research, and conservation. FAO also sponsors workshops, seminars and other training programmes.

The International Labour Organisation (ILO)

ILO has a South Pacific office in Suva. It spends about US$10 million per year in the developing countries of the South Pacific on a wide range of programmes, in most of which education and training is the main component. The total is too extensive to list, but includes regional programmes in trade training, handicrafts, co-operatives management and legislation, manpower planning, small business promotion, worker education, and vocational rehabilitation. ILO works in many of the same fields in national programmes, as well as running courses in industrial relations, adult education for rural women, population and family health courses, travel industry staff training, and courses for supervisors.

The ILO organises other programmes which are specific to particular needs. These include assisting:

- the Cook Islands with apprenticeship training
- Fiji with training for timber workers and with modernisation of the Hotel, Catering and Tourism Occupations Training Programme
- the Federated States of Micronesia with training courses for construction workers
- Kiribati with training of plumbers and small engine maintenance
- Papua New Guinea with training relative to plantations
- Solomon Islands with training for the Ports Authority
- Tonga with programmes in rural management
- Tuvalu in rural multi-craft training
- Vanuatu for mechanics, and for women
- Western Samoa in home management and vocational training.

ILO also finances people from the islands to undertake courses in other countries within the region and beyond. Their programmes do not lend themselves to simple addition of the numbers of persons trained by or with the assistance of ILO, but there are many thousands per year in the region.

The International Telecommunications Union (ITU)

ITU finances, arranges or provides training in the full range of telecommunications expertise. From late 1987 to 1989 ITU trained 289 Pacific persons in all member countries for an estimated 207 person-months. In addition, it provided demonstration programmes and advice, and financed study fellowships for 52 persons for 41 person-months. ITU operates through UNDP offices in the Pacific.

The UN Development Programme (UNDP)

Working closely with other UN, government and other organisations, UNDP has something of an umbrella role for many UN agencies, through its offices in Fiji, Papua New Guinea and Western Samoa. Many of its programmes contain a training component.

The Integrated Atoll Development Project, for example, runs courses and workshops in addition to institution building and on-the-job training. In 1990, this included 25 training workshops in the Cook Islands, FSM, Kiribati, Marshall Islands, Tokelau and Tuvalu. Each course is for a particular atoll community, and includes atoll profiling, planning and management, leadership and other training, as well in some cases as teaching particular skills such as water tank construction or improved agricultural technology. Courses involve relatively large numbers of people in the community concerned, but it is just one of the many training areas in which UNDP is involved.

The United Nations Education, Science and Culture Organisation (UNESCO)

UNESCO has its South Pacific headquarters in Western Samoa. In 1990, its programmes included the following workshops:

- short in-country workshops in school management for 199 school inspectors and advisors, and separately for 1,852 head-teachers from ten Pacific Islands countries

- school management for 40 senior education officers
- multi-class teaching for ten senior education officers
- aspects of educational planning for ten educational planners
- population communication for 19 educational planners
- one month problem-solving attachments for ten senior education officers.

Nationally, it presented curriculum workshops for 12 staff in Kiribati, and for ten in the Federated States of Micronesia (FSM) where it also conducted a workshop in teaching methods for ten persons. Two to three week workshops in development of population materials were presented for 10 and 40 participants respectively in FSM and Solomon Islands. Seven training workshops were provided for 118 teacher trainers on AIDS education both regionally and in individual countries. UNESCO draws on consultants within the region and beyond.

In total, UNESCO, in association with in-country personnel, trained 2,240 senior educators during 1990 in aspects of education which member governments identified as having priority.

The World Bank

The World Bank has provided finance for educational up-grading to several South Pacific countries, as well as financing many courses and study programmes. Its affiliate, the International Finance Corporation, operates a South Pacific Projects Facility (SPPF) from Sydney. SPPF provides training and advice to existing and potential entrepreneurs.

The World Health Organisation (WHO)

Operating from a Western Pacific office in Manila, Philippines, WHO has a representative in Papua New Guinea and another in Fiji for the Oceania region. WHO is the major source of training assistance in the health area for most countries of the region. It also makes an extensive contribution to education in fields beyond those of Health Departments. For example, staff of Public Works

Departments are sent on courses related to water supply.

Though the above are the largest, they are only one third of the international agencies offering courses in or to the South Pacific.

South Pacific regional organisations

While USP was set up exclusively for higher education, many of the other Pacific regional organisations have an educational component in their programmes. These include (and there are many others on a smaller scale):

Association of South Pacific Airlines (ASPA)

ASPA has its offices at Nadi Airport, Fiji. With the assistance of UNDP and International Civil Aviation Organisation (ICAO), ASPA operates a regional training programme, providing instruction and fellowships for one to two week courses. Participants are from the Commonwealth Pacific, from French and US associated territories, and a few from further afield. The three-year programme (1988-90) aimed to train 548 airline staff in the 12 main areas of airline operation.

Forum Fisheries Agency (FFA)

This agency is based in Honiara, Solomon Islands and is mainly an operating agency for member governments, but it also promotes training. Its largest contribution is to the Ocean Resource Management Programme at USP, which has been directed by an FFA staff member with other inputs from USP staff, SOPAC and others. FFA also operates a Fellowship Scheme for professionals in international law, computer technology, and foreign relations, and co-sponsors marine research with the South Pacific Commission.

Forum Secretariat (formerly SPEC)

This is the permanent secretariat of the South Pacific Forum, the annual meeting of Prime Ministers, Presidents and Premiers of the independent Pacific. Its offices are located in Suva, Fiji. While the Secretariat's task is primarily political and economic, many of its

programmes have an educational component. For example, the South Pacific Maritime Development Plan includes contributions to existing institutions, and provisions for direct action from the Secretariat. There are maritime colleges in Fiji, Papua New Guinea and Solomon Islands for Grade 4 masters and engineers and above. There are also many national maritime schools for training ratings and lower level masters, mainly for local services. For the training of Grade 1 masters and engineers, scholarships are provided to send the candidates to New Zealand or Australian colleges. In addition, the Secretariat plans to appoint its own staff to conduct four or more short courses per year in different parts of the region on the maritime industries, and another specialist to provide four courses per year for three years in port safety training. Also provided are: courses for the training and certification of fishermen; comprehensive computer systems for maritime ministries and for shipping offices, with associated training; and training in boat building. The value of the training component is likely to be about US$1 million over four years.

Many of the Secretariat's other programmes have a similar education component. In addition it offers fellowships for middle level managers throughout the region, mainly to gain applied comparative experience.

Media training institutions

Different forms of media training have usually been sponsored by international agencies. PACJOURN was funded by Germany through UNESCO and was set up for journalism training, based in Vanuatu, but is now inactive awaiting further funding. PACBROAD is an agency for broadcasting, based in Honiara, Solomon Islands: it and the Pacific Islands Broadcasting Association training programme were funded by the Friedrich Ebert Foundation. The Commonwealth funded the USP journalism course, and the Catholic church funded the programme at DWI. The University of Papua New Guinea receives no direct funding for that course, although the whole university is indirectly supported by Australian aid through the PNG government.

The South Pacific Geoscience Commission (SOPAC)

Based in Suva, Fiji, SOPAC's work is in the development of non-living marine resources; a relatively new area which could become the main source of income for some Pacific countries. The main training components are:

1 A certificate course in marine geology, taught for SOPAC jointly by USP and Victoria University of Wellington. Over 30 students have graduated.
2 Scholarships for three students per year to take degrees in geology and engineering in Australia, NZ, Canada and the Pacific Islands.
3 On-the-job training for staff from the island countries working with professionals at SOPAC headquarters for periods of three months in laboratory work, data collation and analysis, plotting of results, interpretation, drafting, reporting and other matters. Most of SOPAC's work is research, much of it conducted by specialist ships loaned by metropolitan countries. Such vessels carry islands staff for on-the-job training: usually about eight trainees per year each for about a month. On-the-job training is also financed by SOPAC for islands personnel in Australia, NZ, USA, Japan, Europe and Scandinavia.
4 Workshops are held twice a year for theoretical and practical training in coastal mapping, deep sea exploration, ocean thermal energy exchange, marine geology and geophysics, and marine management. Some are held at the headquarters, others in member countries or on research vessels.
5 Seminars for 10 to 15 persons at a time are held in member countries.
6 Other training includes the development of a high school curriculum in earth science and marine geology, and lecturing in the Ocean Resources Management Programme which is funded by Canada through FFA at USP.

In 1990, $744,110 was budgeted for this training programme, in

addition to training on research vessels and SOPAC Techsec – perhaps $1 million in all. To 1990, 674 Pacific islands staff had received 17,567 person-days of education and training, not including those on scholarships for full-time study. (Based on the average academic year of about 150 study days, this equals about 120 person-years).

South Pacific Commission (SPC)

The SPC headquarters are in Noumea, New Caledonia. Its main training functions include the Community Development Training Centre, based in Suva, which runs a one-year diploma course for mature women involved in community development, home economics and welfare. The Youth Leadership Training Programme and the Fisheries Training Programme, based in New Caledonia, run courses in member countries on demand. They also send selected students abroad, mainly to New Zealand, but even as far afield as Chile and Peru. Training in aspects of broadcasting, video production and graphics for adult education are taught from the base in Fiji.

South Pacific Regional Environment Programme (SPREP),

Formerly based in Noumea as an affiliate of the South Pacific Commission, SPREP recently assumed prominence as environmental concerns become a major issue. It is now an autonomous body based in Western Samoa. It has an education section, national and regional courses are conducted, awards provided for national staff to go abroad for training, and educational materials are produced.

Tourism Council of the South Pacific (TCSP)

TCSP was set up in Suva, Fiji, with funds from the European Community, Australia, New Zealand and various international agencies and had a budget of F$1.8 million for training for the three years 1986-89. It was used for training programmes of government and private sector personnel both on a regional basis and in each of the member countries.

We have little information on the cost-effectiveness of the many programmes provided by the various regional and world agencies. That is not to question their quality or utility, but to note that a comprehensive evaluation of them would be worthwhile, as personal reactions we have heard range from rather negative to enthusiastically positive.

Donor support for training outside conventional institutions

We need to be aware also of the tremendous growth of education and training outside the conventional educational institutions. For example, the Australian and New Zealand ministries of defence operate Military Assistance Programmes. It might be tempting to ignore military and related training, but it needs to be considered seriously as it is the area of post-secondary training that has grown fastest in the South Pacific in the past five years and this is likely to continue in the immediate future at least. One component is conventional military training on a range of fronts, for officers and NCOs, engineers, pilots, divers, computer analysts and so on. An even larger component is not conventionally military and focuses more on training engineers in rural construction and reef passage clearance, fisheries and customs officers in maritime surveillance, health workers in primary health care, rural dental training and so on. In Tonga, for example, the main source of computer training for all sections of the government is the army, using overseas aid and personnel.

Likewise, neighbouring Commonwealth countries provide training both in their countries and in Pacific nations for customs staff in computer technology, data analysis, drug detection and many other fields. There is hardly a department of government anywhere in the islands that is not receiving some education and training, both in-country and abroad, from metropolitan states. The donors are mostly Commonwealth Pacific or USA, but are also from Europe, a small but growing number in East Asia, and even a few in Latin America (mainly in applied marine resource utilisation). Finance for these services is almost totally external. We have no data on the money value of these services, but they could be given a notional

value of $10 million, which is probably an under-estimate, in view of the number of people we see leaving even a very small nation like the Cook Islands almost every week for such courses, and the frequency of overseas trainers arriving to conduct programmes locally. While not doubting the value of these programmes, we feel that the benefits are skewed in favour of non-productive government services (some of them essential nevertheless), and not sufficiently towards productive sectors of the economy.

Non-governmental organisations (NGOs)

Over 100 international NGOs operate in the islands, as well as over 1,000 local ones (Crocombe and Winslow, 1993). Many of them include a component of education and training in their programmes. Their strength is in the non-formal level, servicing the village and the low-income urban sectors. Even though most of the Pacific population live in these sectors, most post-secondary education programmes by-pass them.

Those allocating resources to training needs, may find that even a small reorientation in favour of skill training by NGOs may be a good investment in national development and in equity. Where resources are obtained in the name of the region, but centralised in one place, this can lead to maldistribution. For example, the Centre for Appropriate Technology and Development was set up to serve the region, and overseas funds were granted for that purpose, but over 95 per cent of the trainees, and all of the Pacific staff, have come from Fiji.

Not much has been done for the region as a whole to provide relevant education and training for rural adults. There have been some very successful experiments and models (see, for example: Bamford, 1986; Finau et al, 1984; Angiki et al, 1981). These have generally been initiated and funded by foreign aid but compare poorly with the relatively vast amounts spent on the urban elite.

Solomon Islands Development Trust (SIDT)

In Solomon Islands an NGO was established with the primary goal of providing short-term, low-cost training for rural people. Called

the Solomon Islands Development Trust (SIDT), it set up a remarkable network of self-help training programmes throughout the nation. SIDT is the most effective institution promoting non-formal education in the Pacific. Its purpose is 'To empower villagers through development education and political awareness and to strengthen village life through local organisational efforts and village economic viability'. It operates mainly through mobile teams of volunteers working for minimal income for one or two weeks a month. The volunteers are themselves villagers who have been trained to run workshops for leadership training, community education, resource development and various other matters. In 1991, mobile teams ran 441 workshops and other training courses for 35,806 people, plus 92 women's programmes for 8,080 women, plus 30 special programmes for a further 1,422 people, and a theatre team of seven had travelled throughout Solomon Islands presenting dramatic performances to many thousands of villagers on development education, nutrition, family planning, land use, resource exploitation and other topics (Solomon Islands Development Trust, Report, 1991).

Oceania National Olympic Committees

A new category of NGO which focuses almost completely on training of a different order is represented by the Oceania National Olympic Committees. As a region of the International Olympic Committee, it is entitled to draw training funds from the Olympic Solidarity Movement. Australia, New Zealand and almost all Pacific islands states and territories are members, but the benefits are awarded disproportionately to the lower income islands states. The Oceania National Olympic Committees, which have their secretariat in New Zealand, now bring in over NZ$1 million to the islands each year, for training sportsmen and women and particularly for the training of sports trainers, whether for educational institutions or sports clubs.

Within each country, a wide range of sports codes and a national sports council promote a growing training component in an area which was until recently not involved in much formal training at all.

Women's NGOs

These are involved in a considerable amount of training in small business management, home economics, handicrafts development and marketing, leadership training, food preservation, etc.

Church-sponsored institutions

Since World War II the growth in post-secondary education has been in government-sponsored institutions, even though churches remain a major source, especially in Papua New Guinea, Solomon Islands and Vanuatu. On the whole, the education provided by the long established churches has diminished as a proportion of the total provision at primary and sometimes also at secondary level. Yet, for some of the churches, it has increased at the post-secondary level. Some of the newer churches, such as the Church of Jesus Christ of Latter Day Saints (Mormon) and Youth With a Mission (YWAM), as well as those longer in the region such as the Catholics and Seventh-Day Adventists (SDA), are active in post-secondary education. Brigham Young University, Pacific Adventist College and Divine Word Institute between them have about 1,000 full time and 300 part time students from the South Pacific. The University of the Nations has a number of Pacific Islands students and plans to establish a South Pacific campus in Tonga.

Various churches also operate teachers' colleges, technical, agricultural and rural development colleges in countries of Melanesia, and over 50 theological colleges throughout the region. The extensive religious correspondence education has been mentioned.

Independent island institutions: Atenisi University, Tonga

Institutions exist which are not associated with governments or churches. These are new, and most are commercial enterprises. The only one we know of which is not sponsored by a government or a church and is not a commercial enterprise is Atenisi University in Tonga. Students pay full fees, and contribute to the maintenance of the campus. Almost all buildings at Atenisi were built by students, under experienced supervisors. Atenisi tends to cater to the middle

and lower income categories and has developed a reputation for the self-reliance, innovativeness and responsibility of its students. They have also earned a reputation for academic success in post-graduate courses in the social sciences overseas, though they are not well equipped for science teaching at degree level.

Private firms

This area has seen tremendous expansion in the past two decades. The largest input is from the major international firms: banks, airlines, telecommunications firms, hotel chains, merchandising houses, car manufacturers and so on. They were among the first to bring the new culture of continuous education to the Pacific.

Banks

The two largest retail banks in the region, Westpac and ANZ, encourage all staff to undertake training at all times. Incentives include payment of fees, book and other expenses for approved courses in other institutions, and bonus payments for completion. Both banks follow the practice required by Australian federal law of allocating a minimum equal to 1.5 per cent of total salaries, to staff training. ANZ's actual level is 4 per cent.

Each maintains a regional training centre for the eastern Pacific in Fiji, and another for PNG in Port Moresby. Staff from other countries go to Fiji for courses, and training staff from Fiji (and in some cases Australia or New Zealand) conduct courses in various other islands countries. Staff are sponsored to attend short courses in their own countries in computing, word processing, etc., and there are short in-house courses, as well as optional in-house 'self-development' courses.

The local banks and trusts specialising in international finance, hire accountants and lawyers who are already qualified. They are trained in-house for this particular work, as there are no textbooks or courses in these highly specialised fields.

Airlines and related industries

International airlines, such as Qantas, Air New Zealand, Hawaiian, etc. have complex training programmes. Some training is undertaken on the job, combined with private study (e.g. an apprentice in engineering, or the Advanced Tariffs Course). In most cases part of the training and the examinations are undertaken overseas. Whereas the major international airlines used to train only their own staff, they now market training to airlines throughout the region and beyond.

Travel agents all undertake courses for certification by the client airlines and by the NZ Travel Industry Federation or equivalents elsewhere. Most national airport authorities bring in training staff from the Aeronautical College in Christchurch or elsewhere. Those going abroad attend that college or the International Civil Aviation Training Centres in Bangkok or Singapore. Air telecommunications staff receive their early training at the Telecommunications Training Centre in Fiji, followed by studies in Australia, New Zealand or USA. In more general subjects, staff take extension courses with the University of the South Pacific or with other universities or correspondence colleges abroad.

In telecommunications, to take one example, Cable and Wireless Ltd (a British firm) has subsidiaries or partners in a number of countries. It trains its engineers to degree level in the United Kingdom and sends staff for short courses to Hong Kong, India and elsewhere. In country, staff are encouraged to study, through USP and other extension courses, by the refund of fees and improved prospects of promotion.

Shipping

Training in shipping has been extensive with the training in Australia of all crew for the new complement of long-range police and fisheries surveillance patrol vessels throughout the region. Private shipping has training programmes also, in many cases strongly supported by governments. For example, Kiribati and Tuvalu each operate a marine training school in association with

German shipping companies and with assistance from the German government. The graduates are employed on German and other ships internationally. They make a major contribution to the Kiribati and Tuvalu economies and societies through remittances, capital accumulation, skill training and international experience.

Automotive engineering

Japanese firms in particular have an active training programme in this area. Pacific Islands employees of firms who sell and service their products are sent by these manufacturers (e.g. Toyota, Datsun) to short courses in Japan, Australia, New Zealand, Fiji or other places in the marketing and maintenance of their vehicles, outboard motors and equipment. These firms also send trainers to the islands countries.

Mining

Despite being the largest industry in the region, mining companies used to regard education as irrelevant to their interests and obligations. Today, they are major investors in education. For example, Kutubu Petroleum involves the Papua New Guinea government as well as international and national investors. The management is by Chevron, which maintains a full-time training staff of 18, and requires all other senior staff to carry out training functions. Every employee has to prepare a statement of what education and training they need. This is discussed with training staff and a personal education plan is prepared, and supported by the company.

Working in a very remote area where education levels are low, Kutubu Petroleum has developed major programmes of on-the-job and off-the-job training. Skills related to the enterprise include welding, carpentry, plant and vehicle operations and maintenance, and a wide range of others. The industry also pays for the upgrading of primary, secondary and post-secondary education in the surrounding communities, including paying fees for 220 high school students and 20 students at tertiary institutions in Papua New Guinea and Australia. A College of Distance Education established by the company in co-operation with the Ministry of

Education, already has 427 students in the 79 villages in the area. Two full-time tutors visit the students in their home villages. Curriculum levels and the range of subjects offered increase as standards rise. Contributions to education of this kind are now standard for minerals companies in PNG.

Others

Air Niugini, the largest of the islands airlines, has a comprehensive training programme for its 1,700 staff comprising classroom-based and practical-based classes, self-study learning modules, correspondence courses, workshops and other activities both within Papua New Guinea and abroad, for each branch of its service. The Fiji Sugar Corporation is probably the largest firm involved in agribusiness and has a broad training programme.

Some of the larger firms in Papua New Guinea sponsor employees who wish to participate in the Work Skills Olympics (for a range of technical skills) every fourth year. The PNG Work Skills Association runs national competitions, and the PNG Training Society also facilitates the transmission of skills and the raising of quality.

Comments

It is encouraging to see how far the pattern of training has been adopted by even many small enterprises. It is stimulated by the compulsory training levy that many governments impose on employers, and grants and other incentives are available. Many of the large international firms spend much more than the required amount. Most seems to be done by the large international firms, next by the larger local firms, with a tendency to reduce the training commitment with the size of the firm. While many businesses still do nothing about training, what has been achieved is remarkable.

There is potential for educational institutions to work more closely with employers in providing courses to meet their needs. Many firms already do this, and pay fees for staff attending polytechnic, university and other courses. Some institutions design courses for presentation on campus or at the place of work or else-

where. The main complaint from employers is that universities tend to be too conservative and slow to adapt, and give that as a reason for developing their own programmes. Our one reservation about this, is that many firms tie their staff too closely to directly work-related training, through incentives and advice. While not doubting the value of such training, we recommend that the same incentives and encouragement also be given to study in any area the individual wishes to develop. Developing talents in the creative arts, or awareness of international affairs, or the study of philosophy, or whatever is of value to that person, will facilitate maturity and growth not only of the individual but of the firm and the community.

Commercial sources of post-secondary education

This section is concerned with educational services provided by private enterprise. The distinction between government-sponsored services and private is becoming less clear as some government institutions adopt a more entrepreneurial approach, and as governments give varying degrees of support to private intitiatives. Educational institutions set up by churches and the unique Atenisi University are dealt with separately. But first, we should take note of one of the fastest growing sources of adult education.

As elsewhere in the world, the possibility of acquiring knowledge on the open market, outside institutions, is permeating the Pacific islands – the capitals mainly, but beyond them too. This trend is likely to grow in tandem with formal education. One problem it raises is how to certify those who acquire knowledge without having taken courses in an institution. This problem is discussed further under 'Accreditation' (page 95).

Radio became widespread in the region in the 1960s. In the early stages the stations were all government owned and programmes had a very high educational content. Now a growing proportion of stations are privately owned. Both government and private stations present a wider range of programmes, but radio remains an important source of some forms of education, particularly about current affairs, history, culture and science. Some excellent popular science programmes from Radio Deutchewelle in Germany, the BBC in

London, Radio Australia, or Voice of America, are extensively replayed by stations in the Pacific.

Television was installed in most countries by the end of the 1980s. It is spreading rapidly, though serving largely the populations within 100 kilometres of the main towns. The reach is much greater than the number of sets would indicate as it is common for only one or two people in a village to have sets, but to charge for public viewing. It is a powerful educator, though many of us wish it did not teach so effectively such things as violence and rejection of the norms of almost any society. But it has also been much the greatest contributor to environmental education in the region, and to other positive areas of learning.

The number of newspapers published in the islands more than doubled (to 156) between 1973 and 1989 (Layton, 1992 pp.5-9). There was a big increase in other periodicals published, but particularly so in the import of foreign periodicals, especially from USA. Both local and overseas print media have an important role in adult education.

In-country taught courses

Some education is now provided by commercial sources in most countries. Indian business people in Fiji provide a range of courses, mainly for the Fiji Indian community. Deans Commercial and Associated Schools, for example, operate colleges for various aspects of business training in each of the seven main towns. In Papua New Guinea at least seven firms provide courses – particularly in accounting, computing, communication and management. In many other countries of the region some specialised courses such as those in computing, are offered on a commercial basis. Specialised education is a growth area for small business in the region.

In-country by distance

Fiji is perhaps the only South Pacific country with commercial distance education, provided by the Nadi Postal College. It is confined mainly to the Indian community and concentrates on secretarial, accounting and business studies.

Internationally taught courses

Australia is the main destination, and to a lesser extent New Zealand. The main subjects sought are commercial studies, travel industry, secretarial skills and languages. New Zealand's 35 language schools alone earned $50 million in 1989. Most of the students are from Asia. Those from the islands are mainly Fiji Indian, with smaller numbers from the French-speaking territories seeking English language experience as well as education. Agencies in Fiji advertise regularly for students for courses in Australia and elsewhere lasting from several months to several years. There are also some private students from all countries, sponsored by their families or employers, undertaking studies in Pacific Rim states.

In-country by international distance education

International Correspondence Schools (from branches in Australia, New Zealand and USA), Stott's Correspondence College in New Zealand and various others, have advertised for years in islands newspapers, so we assume they must have attracted a significant clientele. We know many individuals who have taken their courses, but the firms have not replied to requests for information on enrolments by country.

Many others courses are potentially available in a range of fields. One of many examples is the University of Honolulu School of Law, a non-degree correspondence institution which, like the USP Pacific Law Unit, offers preparatory courses to those who wish to have a better understanding of law, or to prepare for degree studies at other institutions.

Summary

The major trend is for diversification; for more diverse types of educational institutions, more education by organisations with other main functions (businesses, international agencies, NGOs), more distance education, more teaching by the media and self-teaching from books, cassettes, videos, etc. Students are going to, and taking more courses by distance methods from, an ever widening range of

countries. Education is becoming increasingly tailored to employment or other specific needs, and the broad general education is in practice being done more by the mass media. All these trends are consistent with world-wide patterns. They are to be welcomed as they open new opportunities to deal with the world as it is developing today.

Courses

With such a wide range of countries, each with a unique history and priorities, education levels inevitable vary. None of the Pacific universities operates only at degree level; in fact most have more students undertaking pre-degree, non-degree or short courses, than degree students. Most are trying to 'overcome' this, seeing it as a problem, but we do not.

Given small populations and specialised economies, institutions are needed which are flexible, multi-faceted, and able to offer courses at various levels and of varying duration. Influences from the colonial era, and from current world trend-setters, shape qualifications, starting and finishing dates, and content. The Pacific can afford to take its own initiatives, for example, in the length of the learning day and learning year as well as in other matters.

USP, UPNG and UNITECH, and Solomon Islands College of Higher Education (SICHE) offer the largest range of courses, including:

- pre-degree qualifications (mostly designed to prepare students for degree work)
- sub-degree diplomas (mostly based on three years of study but beginning below degree level)
- bachelors degrees, with the exception of SICHE, although this institution expects to start teaching degree courses soon
- masters and doctorates: candidates are limited in number and are generally taught in individually designed programmes.

Specialist programmes

Law

UPNG has a law school. Most USP member countries wanted law taught, but the government of Fiji did not, as most lawyers were Indian and the government restricted scholarships for legal training to Fijians until an ethnic balance had been achieved. A Pacific Law Unit, teaching a Certificate and a Diploma in Pacific Law, was set up by USP in Vanuatu in the 1980s, and degree studies are due to begin in 1994.

Medicine

A medical school was not established by USP as the former regional Central Medical School had been taken over by the Government of Fiji as the Fiji School of Medicine (FSM), and continued to train some (though a much reduced proportion) doctors for other islands countries. In the 1980s USP began to grant an MBBS degree to graduates of FSM. UPNG has a medical school.

Engineering

The Government of Fiji wanted engineering taught at USP but the other countries did not. In PNG engineering was set up separately at UNITECH in Lae, which began as a diploma level Institute of Technology and was later upgraded to degree and university status.

Selection of subjects

Universities have been much influenced as to what to teach by the contents of courses in the United Kingdom and Australasia, and to a lesser extent USA, but not at all by the significantly different systems of say, France or Germany, let alone East Asia, the Middle East or Latin America. It was probably inevitable that new systems in small nations would rely heavily for staff, materials and ideas on systems in the larger nations with which they were associated. There are some advantages in derivative systems – they save the cost and agony of reinventing wheels. But they tend to look to past

relevance rather than to future, a subject we discuss further in the final section.

The subjects to be taught at UPNG and USP were selected by two committees of distinguished academics from the donor nations. They naturally reflected two factors:

- the priorities of those nations and others whose systems derived from them
- the personal interests of the committee members.

Changes in powerful personalities were reflected in changes in programmes. For example, the key personalities who advised on the social sciences for USP were an economist and a sociologist, and those subjects received priority, with economics as paramount, and the Professor of Economics as Head of School. Geography had no representative and therefore no place until Australia nominated Professor O.H.K. Spate, an influential geographer, as its representative on the USP Council – Geography was soon added as a discipline at USP. Other subjects for which a good case could be made but which were not strongly represented, remained untaught. What constituted a 'subject' was taken as given from the old Commonwealth system.

At UPNG the leader of the planning committee was a historian and that became much the largest department in the Arts Faculty for many years thereafter. The churches took a vigorous stand so Religious Studies was included. The churches in the USP region, though even stronger nationally, were then just forming a regional body and could not apply the same pressure, so Religious Studies was not taught there.

In both cases (and in the other post-secondary institutions in the region) local interest groups and individuals were consulted, but the major influences were from abroad, or from non-indigenous persons and interest groups in the islands. In short, to understand evolution so far, and likely course preferences in future, we need to focus on the nature and real sources of power, more than on its formal structure. The main parameters continue to be determined

by donor governments and institutions, by islands countries which have disproportionate leverage, and within islands countries, disproportionately by non-indigenous people.

Courses are more determined within the regional institution than is generally realised, despite a stated philosophy of being determined by representatives of all the people served. For example, when USP began, it was asked to give high priority to training high school teachers. This goal was achieved within a decade, and member governments and the university council wanted education courses scaled back and other areas introduced or scaled up. Strong personalities in education, however, repackaged and increased the range of their courses, vigorously marketing them to a new clientele, thus overcoming the publicly expressed wish for change of direction. This kind of process is apparent in all institutions, and as institutions become stronger, they often become less responsive to the needs and expressed wishes of those they were set up to serve, despite the rhetoric. This trend is exacerbated when the institution can rely on external funds for key initiatives.

Of course the university has to find a balance between the differing priorities of member countries, and there are often situations where one or more countries is very keen to have programmes which others do not consider a priority.

Qualifications

The wish to have programmes designed for particular nations, regions or cultural entities has to be modified by the need for world-wide compatibility of qualifications. It should be stressed that it is convertibility rather than equivalence that is important: otherwise national programmes may be forced into ill-fitting straitjackets. The USP Diploma of Pacific Law, for example, is a very appropriate qualification for the many welfare officers, police and prison officers, courts staff, administrators and so on for whom it was designed. It does not aim to be the equivalent of a law degree, but several universities in Australia, New Zealand and the United Kingdom will give some credit for the USP diploma to students

wishing to undertake a law degree in those countries. Nevertheless, while some international standardisation seems inevitable, and may be beneficial, diversity is increasingly the trend.

An increasing proportion of training is being undertaken by international businesses, and this is likely to increase further. Particularly for the international banks, accounting firms, airlines, shipping lines, hotels, mining companies, etc. there is little alternative to internationally accepted qualifications, which staff also value for their status and transferability. These are not necessarily university qualifications; the major banks, for example, know how to evaluate each other's in-house courses.

It is likely that higher education and training will become increasingly liberalised in terms of the places from which it is available, particularly when distance methods or short residence are used. This too points to the need for standardisation and for convertibility, though packaging the increasingly diverse sources and kinds of education into a 'degree' or other large unit of education becomes increasingly difficult. Nevertheless, an education from multiple sources designed for individual needs will become more common and valuable. There may be value in a single broad international educational index, approximate though it would be; the equivalent of a personal income level in dollars, or one of several life quality indexes, or health status indices as used by WHO and other agencies. This, however, is unlikely to originate in the Pacific. It must probably await an initiative from elsewhere and world-wide acceptance.

Access

Locality

There are restrictions on access on criteria of locality. For example, in PNG, Solomon Islands and Kiribati the allocation of places is in part by province or island.

Nationality

This is a factor in access in all Pacific countries. There is not the freedom of movement that there is in the West Indies, or in Europe, or between Australia and New Zealand, or Canada and USA. Students from other countries are in almost all cases under significant restrictions, for example, in both Fiji and Papua New Guinea non-national students are restricted as to what they can say and do. Student visas also take longer and involve more procedures in practice than they do in principle.

The main exceptions are that all Cook Islanders, Niueans and Tokelauans have free access to both New Zealand and Australia; that Western Samoans have some privileged access to New Zealand; that the people of American Samoa, Guam, Northern Marianas and Palau (all of whom are constitutionally related to USA) and citizens of the Marshall Islands and the Federated States of Micronesia, all have free access to USA; people of New Caledonia, French Polynesia, Wallis and Futuna, all have free access to France; and Easter Islanders have free access to Chile. Cook Islanders have relatively free access to French Polynesia. These many exceptions are significant, as free access, absence of restrictions on what one may say and do, and the right of the student and family to take employment, are in themselves incentives to use those avenues.

Nationality is one of the criteria of selection for many short courses run on a regional basis, and on the allocation of many scholarships for regional post-secondary institutions.

Ethnicity

Ethnicity is a factor in many countries. In Nauru, scholarships are reserved for Nauruans, even though migrant workers from Kiribati, Tuvalu and elsewhere have formed the majority of the adult population. In Fiji, government reserves a percentage of scholarships for Fijians, who are relatively disavantaged educationally. Papua New Guinea, Solomon Islands and Vanuatu give Melanesians certain access privileges over others. In practice, probably all Pacific Islands

states provide for some preferential access on ethnic grounds.

Academic level

Access in terms of academic level is a matter for each institution, but the Fiji-based South Pacific Board for Educational Assessment is evolving a consensus about levels across much of the region, and assisting the development of examinations and other assessment criteria for use by member countries.

Social class

Social class is in many places a factor in access in practice, even though not in principle. Weeks (1989), Bolabola (1979) and Framhein (1979) describe for Papua New Guinea, Fiji and the Cook Islands respectively, that children whose fathers are in the higher educational and privilege categories, have much easier access to tertiary education. It is likely that the same applies throughout the region.

Religion

Some institutions are primarily for members of a religious community, including the Brigham Young University, operated by the Mormon Church, and the University of the Nations, operated by Youth With A Mission, both in Hawaii; the Pacific Adventist College (Seventh-Day Adventists) and the Divine Word Institute (Catholic) in Papua New Guinea. However, all accept students of all faiths. DWI actively welcomes 'all persons regardless of race, creed, colour or sex' and forbids proselytising to ensure that the 40 per cent of non-Catholic students do not feel under pressure. Nevertheless, the fact that each of these institutions is operated by a particular church, is a disincentive to some potential students.

Conclusion

Demand for more education for adults has been increased by the media, by travel, and by the growing demand for paid employment.

There is thus rising pressure on governments, and on metropolitan governments with interests in the Pacific to provide scholarships, staff and construction to enable more education at all levels. Metropolitan aid, however, is mainly at post-secondary level.

The sources of post-secondary education have broadened enormously. Universities, colleges and other formal institutions have multiplied in the islands and abroad where islanders have access to them. Both international and local businesses, as well as international agencies and NGOs, have in recent times greatly increased the resources and time they devote to education. Distance education has multiplied. There are more opportunities for self-study both at home and abroad.

These very positive trends have occurred world-wide. By comparison with the countries with which they interact, however, higher education in the South Pacific still has a long way to go.

In looking at current provisions, we noted the focus on the nation, even where populations were quite small. There has also been major provision of regional services, though the countries which comprise any region vary with each institution. Regional education has been in all cases initiated and largely financed by metropolitan countries with interests in the area.

We noted the fact that access is restricted by locality (with rural people having very limited access), by nationality (particularly in regional institutions), by ethnicity and social class, and in some cases by religious affiliation.

Whilst the size of institutions, and access to them, is ideally determined by the numbers who can benefit from them, conditioned by a range of social factors, the most important single determinant of how many can be accommodated in most programmes is the amount of employment available to the graduates.

The comparative case study of the Cook Islands and Solomon Islands which follows demonstrates the advantages, in terms of access to higher education, of smallness, of having a low percentage of rural population, of higher per capita incomes, of access to metropolitan countries, and of investment.

Contrasting Cases: The Cook Islands and Solomon Islands

In this section we compare the Cook Islands with Solomon Islands. The latter is one of the largest countries in the Pacific region, with relatively low per capita incomes, a high percentage of rural population, low levels of investment, and least access to post-secondary education relative to population size.

The Cook Islands, in contrast, is one of the smallest Pacific islands countries, which has high levels of access to post-secondary education. However, access is higher again in the French territories (French Polynesia, New Caledonia, Wallis and Futuna), the US territories (Guam, Northern Marianas, Palau and, of course, the State of Hawaii), and the countries with Associated State relations with USA (Marshall Islands and the Federated States of Micronesia). There are educational advantages in having an association with larger and richer systems.

There is at times so much emphasis on what Pacific islands countries have in common, that the vast differences between them may be overlooked. For those who do not have time to read this section in detail, it illustrates:

1 The enormous increase in post-secondary education being provided outside the conventional educational institutions. This includes business firms training programmes for their staffs;

courses offered by international agencies and NGOs; informal learning through the media; the growth of private educational systems (both locally and by correspondence); and learning from the purchase of books, computer disks, videos, audio cassettes and other means. These are the areas of fastest growth and greatest potential, even though they have not generally received much financial or other support from national governments.

2 The much greater benefits that smaller countries can get in higher education than larger ones, from bilateral donors, multilateral donors, regional educational institutions, and international firms.
3 The concentration of benefits from higher education in national and regional capitals, with relatively little permeating to those in rural communities.
4 The strong correlation of high per capita income levels with high access to all forms of post-secondary education.
5 The educational advantages of those Pacific islands countries with privileged access to metropolitan countries.

The Cook Islands case

Although the national population is 17,500, post-secondary education is largely confined to the capital island of Rarotonga, with a population of 9,800 (56 per cent). This situation of very little post-secondary education being available beyond the national capital occurs throughout the Pacific islands. The extent of post-secondary education in Rarotonga is an amazing increase over even a decade ago, reflecting a world-wide trend. Partly because the Cook Islands is one of the smallest countries, it has a high ratio of post-secondary education per head of population.

Full and part-time study in Cook Islands

In compiling statistics on post-secondary education in the Cook Islands we found that records of the Personnel Planning and Training Office apply in most cases only to civil servants. We comment on training outside the service later. Also, the accessible

Table 1: Full-time students in the Cook Islands
Government post-secondary courses of one year or more

Teachers College, 2 year primary course (secondary trained in NZ)	35
Nursing, 3 year clinical course for diploma	10
Nurse Practitioner post-grad 1 year (for islands with no doctors)	6
Theological, 4 year minister's course, 13 couples	26
USP/Tereora College joint pre-degree programme (as each student takes 5 courses = 120 USP credit course enrolments)	24
Approximate total (varies continually)	81

Table 2: Full-time, short-term, post-secondary courses in Cook Islands
Government and international agencies
(Not all are offered each year)

Public service induction courses for new staff	about 120 p.a.
Public service basic supervision course	about 20 p.a.
Personnel management courses	about 20 p.a.
Trade training 1 month courses at 3 levels, below apprentice, in electrical wiring, mechanic and construction	60 p.a.
Regional & sub-regional courses, 1 to 6 weeks in admin., financial management, etc. funded by ILO, AIDAB, SPC & others	80 p.a.
Catholic, 3 month lay leader's course, 6 couples	12
Police, 10 weeks basic course	6
Travel industry (not including in-house training)	360
Approx total Cook Islanders per year	678

Table 3: Part-time post-secondary study in the Cook Islands

University	
USP Extension Centre, 1st semester, 1991	
credit course enrolments	331
(most take one course, a few take two)	
non-credit courses, taught locally	100
Massey University approx per year	5
University of New England	1
Other universities overseas approx per year	5
Other	
Assistant Health Inspectors, 3 year course	3
Laboratory technicians	3
Apprenticeships (4 year) in 7 trades	17
Police, 2 years applied training with study for examination	8
Banking courses (mainly in-house)	30
Airlines, travel agents, shipping, communications	50
CI Bible Training College (Assemblies of God),	
part-time 1.5 years course, graduates in 1990	21
Estimated part-time training by other religious	
denominations, of which there are about 14	200
At least 2 theological distance schools (in Samoa & NZ)	200?

Also:

- Sports administrators, trainers, etc. Olympic funding sends coaches, lecturers, etc. to CI to run courses up to 3 months in each sport and in sports medicine, administration, certification, etc; and funds Cook Islanders to the Australian Institute of Sport and elsewhere
- Youth organisations, (15) most youth belong to 1 national in which training is important, and 1 local social/community organisation
- Cultural organisations (15) emphasise training in performing

Table 3 continued

arts. Though not certified, they travel and have earned the Cook Islands an international reputation for excellence.
- Women's organisations (44). Most have a training function, generally in food production, preparation or preservation, clothing and family welfare. The National Council of Women, with the Women's Affairs Division of the Ministry of Internal Affairs, has run workshops in small business, human resource development and other subjects, usually subsidised by aid grants.
- Worker and professional associations (8) give priority to education. The Public Service Association runs workshops and courses in association with Public Service International.
- International voluntary organisations also play a role in training.

records were not all for the same year: those for full-time and part-time scholarships are for 1990, those for in-country short courses for 1988, and those for overseas short courses for 1987. This is not, however, a major problem, as there has been no radical change. The main trend, as one would expect for a small nation, is for an increasing proportion of higher education to be undertaken overseas.

This can only be an estimate, but the number of Cook Islanders in part-time training each year may be higher than the 9,800 adults on Rarotonga, as many are involved in several programmes. This is not so on the other islands, owing to the concentration of opportunities on Rarotonga.

Full-time study abroad

Cook Islanders going abroad for full-time study used to be concentrated in New Zealand, but over the past two decades study sources have spread remarkably. This reflects the wider range of scholarship opportunities and the greater interaction of the Cook Islands with

Table 4: Students in post-secondary institutions overseas
(FT = Full time; SC = Short course; Gov = Government; Pr = Private)

	AS	NZ	FJ	SM	TN	PNG	SL	VN	NC	FSM	MR	OPI	US	AS	ER	Total
FTGov	21	36	24	5		5	3						2/1		1	98
FTPr	2	15	5 (SDA)			7 (SDA)							29/1		1	60
FTTot	23	51	29	5	–	12	3	–	–	–	–	–	31/2		2	158
SCGov	24	10	28	21	6	5	5	9	5	1	1	6	10/–	12	1	144
SCPr	15	25	15										10	5		70
Total	85	137	101	31	6	29	11	9	5	1	1	6	86	17	5	530

Abbreviations: AS = Australia; NZ = New Zealand; FJ = Fiji; SM = Samoa; TN = Tonga; PNG = Papua New Guinea; SL = Solomon Islands; VN = Vanuatu; NC = Caledonia; FSM = Federated States of Micronesia; MR = Marshall Islands; OPI = Other Pacific Islands (4 Kiribati, 1 American Samoa, 1 French Polynesia); US = United States of America/Canada (most at Brigham Young University in Hawaii); AS = Asia (Japan 4, Malaysia 3, Philippines 2, India, Singapore, Thailand 1); ER = Europe

other countries. The present mix has 67 per cent of students in the industrialised countries of the Pacific Rim with which the Cook Islands interacts most on trade, migration, investment, aid, diplomatic and security relations, etc., and 33 per cent with other Pacific Islands with which there are some common interests, though less economic or political interaction.

The area of needed growth seems to us to be North-east Asia, particularly Japan, China, even Indonesia. These are the countries which Cook Islanders are going to need to understand and with which they will be increasingly interacting. The first Thai scholarships for degree courses in Thai universities, were taken up in 1991; some went on short courses to Japan, and there are other examples.

New Zealand remains the largest single source of post-secondary education, with 30 per cent of the total. Next comes USA (mainly Hawaii) and Fiji with 19 per cent each, Australia with 15 per cent, Papua New Guinea with 8 per cent, and the last 8 per cent go elsewhere. The biggest recent change has been the growth of Hawaii as a study destination – mainly Brigham Young University, but also University of Hawaii and others.

Those who go overseas for full-time study, overwhelmingly prefer the industrialised countries (mainly New Zealand, Australia or USA). Students fear the difficulty of learning a new language and therefore resist the idea of study in Japan, France, Germany or elsewhere where scholarships are available but a new language is required. Some prefer islands institutions usually because they are reputed to have easier standards rather than because they want to study in islands institutions. But student preferences are not the main determinants of where students study; scholarships are. Where they are tenable is decided by the donors.

Other sources

Statutory authorities

Police and prison officers do about two years training and service in the Cook Islands. Then, after passing local examinations, about six of the former and one or two of the latter go to New Zealand each

year for a course. Later in their careers they return for the New Zealand police or prison courses at various levels. One police officer is studying law in New Zealand. When external funds are available for training in other countries, these opportunities are taken.

We will not detail the other statutory authorities beyond noting how changes in the sources of aid correlate with changes in training. For example, as a result of recent diplomatic efforts by France to enhance its standing in the region, French generators were supplied to the Electric Power Supply in a package which involves training in France.

Tourism

Tourism is the nation's largest industry. The CI Tourist Authority has the equivalent of four full-time training officers and an extensive training programme, in association with the Hospitality Industry Training Board and the CI Hospitality Training School. The School has a throughput of about 240 students per year on a block release system. Courses in hospitality industry vocations are also taught at the three main colleges.

Short courses of three days to six weeks duration are taught by specialists brought from overseas for this purpose. In 1990 some 324 persons attended such courses. Three private sector travel industry staff were also sent by the Authority to short courses in Vanuatu and two to Tonga. The Authority emphasises training for those in the private sector as it considers the results are more positive.

The three major hotels have limited training programmes both in country and overseas. The many smaller hotels and motels do on the job training but few send staff overseas except those funded by the Tourist Authority.

Tourism has widened the demand for leisure activities to such an extent that there are now commercial tennis schools, sailing schools and other leisure skill training activities used by visitors and local people alike.

Airlines

The domestic airlines provide extensive training locally and overseas. Air New Zealand, the largest international carrier, has a complex training programme, both on the job combined with private study, and in Auckland. Perhaps 20 per cent of the 40 staff go to Auckland annually for short courses. Polynesian Airlines has a smaller training programme.

The CI Airport Authority pays for training staff from the NZ Aeronautical College. Others go there or to ICAO Centres in Bangkok or Singapore. Telecommunications staff are trained first in Fiji and then in New Zealand. They also take extension courses with the University of the South Pacific, with Stott's College or with International Correspondence Schools.

Travel agents all undertake courses for certification by the client airlines and by the NZ Travel Industry Federation.

Shipping

Training in shipping has been extensive. The police train all crew for the patrol vessels in Australia and New Zealand. The government sponsors a small training staff, and six trainees on private commercial vessels.

Banking

ANZ and Westpac banks each send several staff each year to Fiji for courses, and training staff from Fiji, Australia or New Zealand conduct courses in Rarotonga. Staff are sponsored to attend short courses locally in computing, word processing, etc., and for in-house courses, including optional 'self-development' courses. The largest of the trust banks holds a daily meeting of professional staff to discuss cases and principles. Staff who take courses with USP, Massey or other extension systems, have their fees paid. The CI Development Bank pays fees for staff who take extension courses through the Bankers' Institute in New Zealand, or through USP. It normally has one or two staff overseas in full-time training at

universities in Fiji, New Zealand or Australia. A training officer is employed, and the Asian Development Bank finances short-term training for Cook Islands staff in other countries.

Communications and media

In communications and media, the CI Broadcasting Corporation (radio and television) uses in-service training and facilities in the region and beyond. Many more courses are offered than they can take up, owing to the small staff. The nation's only newspaper accepts few of the offers received for the same reason. They recently had a journalist at the University of Queensland, and another at a New Zealand polytechnic, but otherwise use on the job training and correspondence courses.

Mention must be made of the educative role of the media. Television, broadcasting 35 hours per week, includes seven hours of international news, and two hours of national news, per week. Radio offers news bulletins from several countries as well as nationally. Television presents four hours a week of young children's educational programmes, for example, Playschool and Sesame Street; at least two hours a week of adult education, for example, 'Beyond 2000' and 'Wild South'; and five hours a week of cultural material, including scientific films from Smithsonian Institution and others, and expressive arts. Television has more of an educational content (both positive and negative) than radio.

Telecom Cook Islands has an extensive training programme in-house, using distance education, sending staff overseas, and bringing in trainers. At the time of enquiry a German trainer from ITU was conducting a digital fault-finding course for TCI staff.

Computing

The demand for computing skills outstrips supply, but most has been provided outside institutions of higher education. The government has provided courses for civil servants, sometimes by hiring private firms. The larger firms have their own training staff or contract with one of the five computer sales, service and software companies on Rarotonga (a surprising number for a population of

9,000) to provide it. Perhaps 20 times more adults have received computing training outside the formal education system than within it. Even though the demand for these urgently needed skills has been apparent for over a decade, formal institutions (here as worldwide) are slow to respond except in token ways.

Engineering

The main automotive engineering firms send staff to Japan, New Zealand, Australia, Fiji and elsewhere in the region, for seminars and workshops sponsored mainly by Japanese suppliers. Some suppliers send trainers to the Cook Islands (usually from New Zealand or Australia) to conduct short courses and some local firms bring in their own trainers. At the time of writing one firm had an expert in computer-assisted engine diagnosis from Australia to run a short course for their staff.

Apprentices in several fields take a three-year course which involves some training in New Zealand. Some senior staff have a training role, and one mechanic runs an evening course in the USP continuing education programme in vehicle maintenance. One automotive firm had one staff member studying a course in Japanese language and one in accounting with the USP Centre.

Culturing of pearls

The lucrative culturing of pearls in Manihiki atoll provides one of the few areas of significant training outside Rarotonga. Tahitian experts taught the farming techniques, drilling, advanced diving skills, harvesting, grading and management. Although Manihikians are famous divers (a Manihikian long held the world record for skin diving) international certification is now required. Japanese experts are flown in to do the delicate seeding operation. They will not teach their skills.

General merchants

The largest general merchant hires an independent professional to provide computer courses as required, pays the fees of staff undertaking USP courses, and sends staff to other training programmes

such as short courses sponsored by the Cook Islands Tourist Authority.

Other training is undertaken by small businesses, for example, the only pharmacy conducts a brief weekly training session and brings product specialists from abroad several times a year, but we have not checked these in detail.

Voluntary organisations

Nor are records kept of the voluntary organisations (NGOs), of which there are over 220 in the Cook Islands (Crocombe, 1991), but some send students abroad for full and part-time courses. Those conducted by the Commonwealth Youth Programme and the South Pacific Commission Community Development Programme work closely with government, even though the students may be from NGOs. Others work independently: for example, the Rotary Club has sent five students away on one year scholarships for post-secondary study. The Public Service Association and Public Service International have several union representatives abroad per year for workshops and short courses.

Churches

Almost all the churches send people abroad for theological, community development, counselling and other courses.

Extent of post-secondary education

Adding all these, several thousand persons are taking post-secondary courses in one form or another per year within the country (including those studying by distance methods from abroad), and 300 to 400 per year abroad. This is a remarkable figure, and means that each person of working age on Rarotonga is engaged, on average, in some form of education and training each year, and about 10 per cent of such people go overseas for all or part of the time to do so. Most organisations would facilitate more training if courses were available.

There are several explanations for these high levels.

1 Cook Islanders have had widespread secondary education since the 1950s.
2 The Associated State relationship with New Zealand gives all Cook Islanders free access to New Zealand and Australia, and to the institutions of higher education of both, with all the privileges of local citizens.
3 Most higher education overseas is financed by foreign aid or by international businesses. Higher education internally is financed by aid, business or the Cook Islands government.
4 Most post-secondary education outside the Cook Islands is free, and the main exceptions (Brigham Young University and the Pacific Adventist College) provide opportunities for students to earn their fees and living costs. A few families send children abroad for post-secondary education at family expense, and this is facilitated by the relatively high per capita incomes in the Cook Islands (about US$ 3000 per year in contrast with the Pacific Islands average of about US$ 700).
5 Some years ago the government, to encourage more people to study, offered to refund the fees of all who passed their courses, and a salary increase for every degree or diploma. The opposition sought more popularity by offering a salary increase for a section of a degree or diploma. The next counter-offer saw a salary increase for every course passed towards a degree, although it is not paid if the department's budget is low. With government as the largest employer, this led to a big increase in studies and salaries!
6 A further increase in extension studies occurred from mid 1990 when the USP Centre began advertising its courses at prime time on national television.

Driving forces

The driving forces of the revolutionary changes in higher education of the past generation are threefold.

Aid donors

Both governments and international agencies offer scholarships,

training staff, travel funds, equipment and construction costs to facilitate an ever widening range of training programmes at home and abroad. The vast majority of all government-sponsored post-secondary education, whether at home or abroad, is funded from abroad.

Larger international firms

The big international firms provide the driving force in the private sector, bringing in patterns of training applied in their countries of origin.

Work and study

The third major factor is the emergence of institutions which provide structured facilities for students to work and pay their own way through higher education. For example, within the Cook Islands:

- the USP Extension Centre
- government in-service training courses
- the training programmes provided by all the larger firms.

Overseas examples are:

- Brigham Young University, which has nearly 30 Cook Islands students
- Pacific Adventist College, which has seven
- private students in New Zealand or Australia working their way through.

Comparison with Solomon Islands

It is not necessary to reiterate all the adult education available in Solomon Islands that is in principle the same as those in the Cook Islands, for example: the public service has a similar programme for civil servants; the same major banks operate with the same training policies; the same international agencies run similar courses; there is a USP Centre; many of the same NGOs are active with their respective training components; and there are many programmes for the training of trainers, which speed up the internal training process. There are, however, some major differences, and it is on these that we focus.

Solomon Islands has 18 times the population of the Cook Islands, is much less urbanised, has about one quarter the per capita GNP, and formal education began considerably later. Another major difference is that all Cook Islanders have free access to both Australia and New Zealand (whether for education or any other purpose). Solomon Islands, like most of the rest of the region, has no such external outlet.

In the USP extension centres, the number of students studying for extension credit courses, summer schools (Dec. 1990/Feb. 1991) and continuing education programmes in the first semester of 1991 illustrate the radical difference.

Extension enrolments	Summer School enrolments	Continuing ed. enrolments	Total	Per 1000 of population
Cook Is. 451	28	155	634	37.3
Solomon Is. 314	37	74	425	1.4

Reasons for differences

Before going into the reasons for Cook Islanders receiving 27 times more education per capita through this source (and with similar discrepancies through some other sources), we might note that the contrast exemplifies how drastically pouring aid funds into a regional centre can discriminate against the most disadvantaged.

Thus a major factor holding back higher education in Solomon Islands has been that the external aid nominally allocated to it through regional institutions has been siphoned off, mainly by the host country. Solomon Islands has 20 per cent of the USP region's population, and if 20 per cent of the aid funds put into regional post-secondary institutions in Fiji had been put into upgrading the highest levels of education in Solomon Islands, they would have been much better off today. For example, relative to population size, USP has produced nearly ten times more graduates from Fiji than from Solomon Islands. Likewise, more than ten times more has been spent, almost all financed by foreign aid to the region, on training Fiji academic staff than Solomon Islanders.

Yet another difference is that as incomes are higher in the Cook Islands, government and individuals can spend more on education. Moreover, there are high material rewards for study in the Cook Islands. Civil servants, much the largest part of the workforce, receive a salary increment for every single relevant course they pass, within their grade. Almost everyone we spoke to feels that this is taking study incentives too far, but once introduced by one government, it is difficult for another to change it. And it becomes a precedent for other employers who are competing for staff.

Another important difference is access by preparation. All Cook Islanders receive secondary schooling, but only about 10 per cent of Solomon Islanders. Differences of geographical access are discussed under 'Equity issues' on page 126 and of gender under 'Access for women' on page 129.

On the question of age, the part-time extension students in the Cook Islands come from a wider range (i.e. only 144 or 44 per cent are under 26, whereas 187 or 56 per cent are 26 and over) than those in Solomon Islands. The figures for Solomon Islands are not available, but most are thought to be under 26. This is partly because secondary education has been available for longer in the Cook Islands, so that once new courses and incentives to take them are in place, there are more potential candidates of all ages. Moreover, due to the mobility of Cook Islanders between the Cook Islands, New Zealand, Australia and elsewhere, and the extent of intermarriage with non-Cook Islanders, English is more widely spoken.

Too often we hear of the disadvantages of smallness. In higher education at least, there are big advantages. The only countries with more access than the Cook Islands are both smaller. Nauru, with half the population, has virtually unlimited access because with income from phosphate it can afford to send students almost anywhere. Niue, with a lower per capita income, and one ninth the population of the Cook Islands, has a higher rate of overseas education. This is largely because donors feel obliged to provide something for each country. A community the size of Niue within

Papua New Guinea, for example, would qualify for very few of the training opportunities Niue has because of its national status.

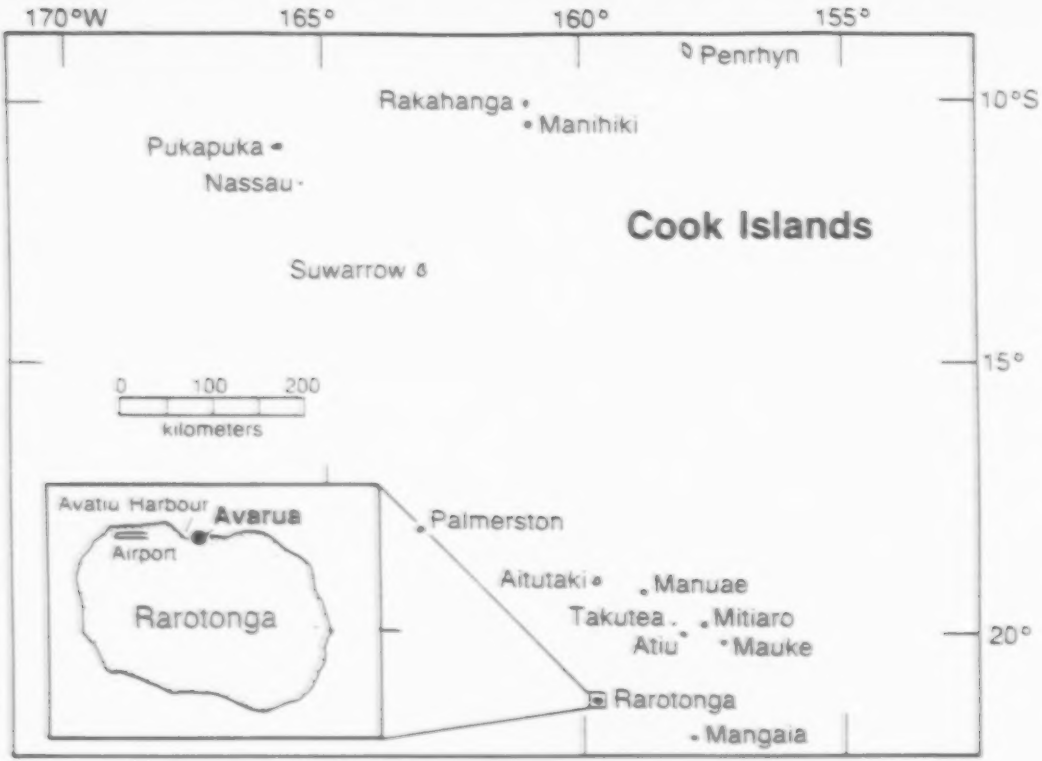
Recent educational developments in Solomon Islands

Solomon Islands is developing a major tertiary institution in the Solomon Islands College of Higher Education (SICHE), which has Schools of Education and Cultural Studies, Nursing and Health Studies, Finance and Administration, Industrial Development, Natural Resources, Marine and Fishery Studies, and General Studies. By 1991 the College had 1,285 students in full-time credit courses, plus a growing programme of non-credit adult education courses.

In addition, a new distance education network called SIDEN (Solomon Islands Distance Education Network) has been set up with the help of the Commonwealth of Learning in Vancouver. It is providing bridging courses for people in rural sub-centres to enable them to qualify for diploma courses on the campus. The European Community has just provided $6 million to establish 25 Rural Training Centres to enhance this exciting project in distance education, which could radically improve prospects for education at all levels in Solomon Islands. It is also an experiment from which all Pacific islands and countries beyond may learn and benefit.

There are also other tertiary institutions such as the Solomon Islands Telecommunications Training School, the Police Academy, and several theological colleges, as well as computer training by private as well as government sources. On the creative side, some 28 books by Solomon Islanders have been published in the past twenty years.

The Solomon Islands government has several times stated its intention to upgrade SICHE to university level, but it has been dissuaded by aid donors who have considerable power in such matters. Hopefully this goal will not be too long delayed, as their effective access to other sources (mainly University of the South Pacific and University of Papua New Guinea) leaves Solomon Islands educationally marginalised.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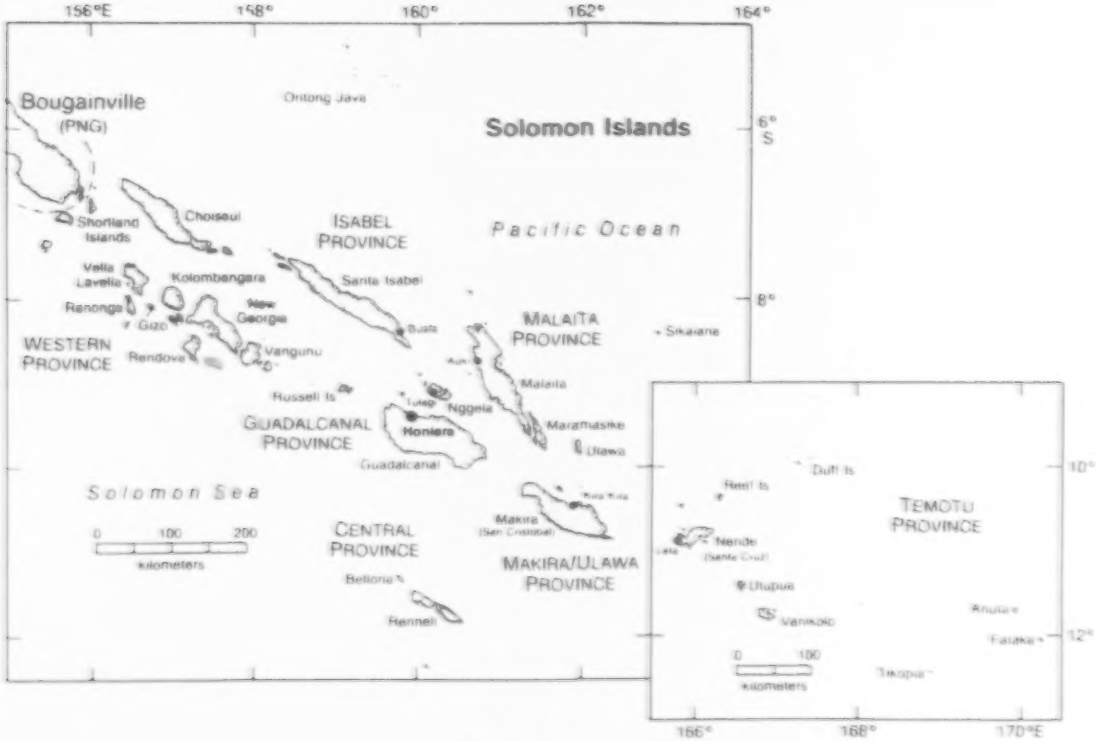
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Trends and Policy Options

Current trends

The main trends that can be seen in post-secondary education in the South Pacific include:

1 There is a steady growth in the integration of study with work.
2 There has been a gradual increase in access to post-secondary education as education systems have expanded from pre-schools upwards, most recently in Melanesia. Two other contributing factors are the growth in distance learning, and in access to computing and other advanced learning techniques by the urban elite.
3 The benefits are concentrated on national and regional capitals, so that there has been a relative worsening of post-secondary opportunities for students in rural communities, the urban poor, and those living in peripheries of regional systems (though this last can be overcome to some extent by very small nations).
4 The proportion of women students is increasing such that they already outnumber men in post-secondary education in Hawaii, Guam, New Zealand and French Polynesia. Proportions are much lower in countries with lower income and education levels, but are growing slowly.
5 There is a rapid growth in the range of courses. This is due to the increasing complexity of tasks and the consequent need for more complex preparation. It is also due to acceptance of the fact that personal development can be facilitated by education

appropriate to individual needs, whether work-related or not. It is a positive, world-wide trend.

6 More business and government institutions are adding an educational component to their main functions.

7 More emphasis is being placed on local, national and regional curricula, especially in relation to topics with a high cultural component. The extent to which this is translated into action is not known, but there is a large rhetorical component.

The emphasis in the rest of this chapter is on issues with policy implications. Some of these are included in the summary of trends above. Others, which are not necessarily yet reflected in actual trends, include the need for more maths, science and technology, more transferability of qualifications, greater emphasis on personal development of students, the vital issue of quality and questions of management, equitable distribution of benefits and finance.

Policy issues

Towards a culture of continuous learning

Integrating work with study

Everyone agrees that learning should be a life-long process, but it is often not put into practice. The main tendency is still to lengthen the childhood schooling process, sending students straight from secondary school to tertiary level, without allowing them adequate opportunities to widen their experience and thus gain responsibility and maturity. However, an encouraging sign is the number of governments which now insist on one or more years of applied experience before further full-time study.

The SOPAC/USP programmes integrate work and study closely. Their Certificate in Earth Science and Marine Geology programme begins with a basic course of three months, then four courses each of six weeks spread over three years, interspersed with applied work.

Involvement in part-time or periodic courses or programmes is becoming commonplace. The initiative often comes from the inter-

national organisations, NGOs and bilateral donors which are funding such courses, from international as well as local firms with training needs, and from individuals who are conscious of what further skills and qualifications can do for them.

In addition to formal courses, self-education using books, computer software, video and audio cassettes, radio and other media continues to expand. It is hoped that the Pacific governments will enhance this process by encouraging commercial outlets for educational books, computer software, videos and courses, as well as increasing the educational component of the largely government-owned television networks.

Adding educational components

More government departments, statutory authorities, private businesses, churches and voluntary organisations, are adding an educational component to their primary function. Many courses are initiated by the main employers of the trainees, for example, teacher training by the Ministries of Education, banking courses by the banks, aviation industry training by airlines, rather than by a community college or university. In view of the low levels of education relative to the rest of the Pacific Basin, with which the island nations are increasingly interacting, this is to be encouraged. In fact, with limited national resources, it is likely that this tendency offers the best hope of catching up. The formal educational institutions will need to work closely and supportively with these other organisations.

Curriculum issues

Science, Maths and Technology

Expertise in these subject areas is in short supply throughout the region. There is a widespread awareness that too high a proportion of persons have been trained in general arts subjects, and too few in science, technology, commerce and management.

Those with the arts training were absorbed for a time by governments, but this is becoming increasingly difficult. It is also question-

able whether a country is best served by a government overwhelmingly staffed by personnel with a general arts training. Many such persons are now without suitable employment, despite the scarcity of technical, scientific, commercial and managerial expertise. The gap is filled in part by expatriate staff (usually but not always at high cost), and its existence remains a deficiency in national achievement.

One problem is that science courses are generally more difficult. Many students who prefer the natural sciences take a social sciences course, as they can obtain a qualification more quickly and its market value has been at least as high. The authors have seen many students who, having failed in the natural sciences, turn to the social sciences and achieve high grades, even though they preferred the science option.

A Papua New Guinea study noted that science was not popular at school because it was considered difficult and that there was an 'alarmingly high drop-out rate from science courses at tertiary level' (Wilson, 1988). Science students worked harder and had higher educational and job expectations than their non-science peers. As was to be expected with many of the students being accustomed to agriculture, fishing, hunting and other interaction with the natural environment, they did better in biology than in chemistry or physics. The nation remains very short of trained scientific personnel, as well as of people with an understanding of the changes being wrought by science and technology. The PNG experience seems to be broadly true of the Pacific region.

The economic success of a nation, according to Porter's study of world patterns, depends on most students receiving 'education and training with some practical orientation' (Porter, 1990 p.629). He considers mathematics, computing, writing, basic sciences and languages to be vital, and notes that 'the training of a significant proportion of outstanding students in engineering seems to provide the greatest benefit to an upgrading economy'. Such training contributes both to innovation and to quality as managers (Porter, 1990 p.629).

The 1990 high level review of its foreign policy by the New

Zealand government concluded, on the basis of investigations in all countries of the region, that the 'one educational concern expressed more often and with greater anxiety than any other, was in the field of skills training. Repeatedly the group was told by heads of government, ministers, education officials, church education authorities, NGOs and women's groups of the urgent national need for vocational training and senior secondary education. On several occasions this was conveyed in the form of criticism of USP for failing to meet the need' (Henderson et al, 1990 p.146). The same concern is expressed in Micronesia about the education available in the north Pacific Islands.

Success in science, mathematics and technology necessitates more emphasis on these subject areas from kindergarten onwards. This is now possible and is being achieved in some places by conversion courses for both teachers and students who are interested in these subjects and greater incentives for quality science teachers (including salary differentials, periodic retraining opportunities, and adequate equipment). A Pacific-wide conference on 'Quality Mathematics Education and Popularising of Mathematics' held at UPNG in 1992 raises hopes for significant improvements (Ahuja, 1992).

Students would also be encouraged to enrol in science and technology courses if governments appointed more persons qualified in these areas to senior government posts, particularly as the most likely potential growth areas in the Pacific islands nations are in the minerals and marine industries, primary product processing, bio-engineering and non-conventional means of energy production; and the most likely hazards are in environmental deterioration ranging from the Greenhouse Effect to scientific recycling of waste. All these and many other topics need a proportion of administrators with an understanding of the sciences. This would serve national needs better and it would shift the image of an arts education being more prestigious. Businesses are doing this more than governments, not as a matter of principle, but because they find the science and technology background increasingly relevant to management in today's context.

One option under consideration in PNG is for a natural science college. That would not be feasible for the smaller countries, though some specialisation may be possible for countries the size of Fiji or Solomon Islands. At university level, USP, UPNG and/or selected metropolitan universities could offer specialist science teacher training, not only through conventional courses, but through short refresher and conversion courses, both on campus and in-country.

There also needs to be an element of social science and humanitarian studies in science and technology courses, and of scientific and technological awareness in social sciences and humanities programmes.

Culture

Most post-secondary education in the islands is based to some degree on knowledge and skills from the industrialised world. Even the prestigious and successful National Arts School in Papua New Guinea, which was set up expressly for indigenous arts, has drawn heavily on external technology and techniques, staff and funding. It is, nevertheless, very much a national school, and the local cultures remain unique, despite the incorporation of some borrowed components.

However, institutions which teach telecommunications, engineering, aviation, accounting, electronics, the exploitation of submarine minerals (SOPAC), etc. deal with subjects which are overwhelmingly external in origin.

Whatever the subject matter, every institution wants to apply its own stamp of legitimacy, propriety and uniqueness, seeing the area it serves as the one from which some symbols of uniqueness must be extracted and applied.

Culture is now receiving higher priority in the islands than ever before. It is a world-wide trend, which is in part a reaction to massive external influences, but which is also facilitated by more rapid communication and more income. This trend probably has some distance to go before it levels off. It is given a narrower definition in practice than the rhetorical all-embracing 'way of life'

concept, and is being focused on language, history, the expressive arts, and a little on leadership.

Much less is being done about teaching values, even though this is perhaps the core issue. This may be due to ambivalence about the appropriateness of some traditional values which evolved to suit very different contexts. But the issue of values should be objectively discussed and evaluated so that decisions on action can be taken.

The New Zealand foreign affairs review team received throughout the region 'a consistent message about the importance of local culture and language to education. The renaissance of Pacific cultures will have important implications for the kind of education that Pacific island countries want.' (Henderson et al, 1990 p.146). The team noted that the current emphasis of Pacific governments on language and other cultural issues focuses on the nation, and creates the need for new materials, especially in local languages, and for the special training of teachers.

Establishing a national identity and coherence, in which the education system plays a major role, is easier for countries like Samoa, Tonga, Kiribati, Tuvalu, Niue or the Cook Islands, each of which has its own language and a distinct, relatively homogenous culture, than for more complex Melanesian nations, with multiple languages and cultures. In both categories, particular interest groups may try to use such programmes to advance their interests unduly. The most difficult cases are those such as New Caledonia or Fiji, which contain radically different cultural systems. The difficulty makes it more rather than less important for the education systems to assist students to understand other cultures and value systems within the nation as well as their own.

Cultural studies do not need to play a large part of the curriculum, but there is a case for having them both as a separate topic and as an element in most if not all other subjects.

One excellent example of the latter is the current attempt to develop a programme in Pacific science by studying the physics of traditional canoe design, the pharmacopoeia and biochemistry of traditional medicines, the economic biology of traditional horticulture and marine culture, the mathematics implicit in traditional

long-range astro-navigation, the technology of snaring octopus, preserving various foods, constructing buildings and so on, which was initiated by Professor John Morrison and others at the University of the South Pacific, and is being implemented jointly with the University of Auckland (Geraghty and Morrison, 1993). It can be used either as a separate course, or components can be extracted and used in various courses.

Some governments want the national language to be given more priority at higher levels of study, lest it become marginalised. Athough most Pacific islands countries have a single language, the Melanesian states have many, so there are real constraints as to how far this can be done. But the vast majority of Pacific people do not have a good knowledge of English or French, and trying to convey information or ideas, particularly for various forms of continuing education, requires the use of local languages. (Nevertheless, many of the Pacific elite who strongly advocate the use of their native language, do not teach it to, or use it with, their own children).

The extent to which the curriculum needs to be adapted to the national, regional or other environment varies considerably with the subject. A good qualification in mathematics or statistics or physics, for example, may be just as useful wherever it is done. Incorporating national needs becomes more important in subjects such as the creative arts, social sciences, botany and so on. It is important to decide what elements of culture are to be given emphasis in each programme of post-secondary education. Some countries may find it useful to spell this out in more detail than is now usually done.

The important question arises of how far it is necessary or cost-effective to prepare special curricula for each small province or nation or region or system (e.g. when various government and church institutions teach the same topics at similar levels in the same country). Too much emphasis has been given in some fields to the 'need' for special curricula for particular countries or regions.

There is indeed a case for this with some programmes: for example, if the Samoan government considers that teaching of or in the Samoan language is a priority, it is likely to have to create its

own curriculum. However, to take another example, in the training of nurses some content has to be specific, such as social structures and national legislation; much more is universal. There is no case for re-inventing the wheel, and more use could be effectively made of mass-market materials from larger nations where much more time and resources have been devoted to their preparation, and where they have been tested in wider and more competitive markets. This does not preclude the need to complement such materials with a good mix of national materials.

Culture versus quality

While a cultural component is undoubtedly an important ingredient in any curriculum, education of the highest possible quality has to be regarded as even more important than culture or context. What happened to Tongan engineering students in Papua New Guinea is an example of this. The civil engineering requirements of islands states differ from those of the metropolitan countries. (They also differ between islands states). This, and the availability of scholarships, were good reasons for sending students from Tonga to the Engineering School of the Papua New Guinea University of Technology (UNITECH). However, after its engineering students had graduated with a B.Eng. from UNITECH, Tonga gave them a year or two of practical experience under supervision, and then sent them off to a metropolitan country to do another B.Eng. because they found the UNITECH training inadequate. In other words, they found quality more important than content. Many similar examples could be cited.

To take a different example, there is an obvious case for subjects like political studies and sociology being taught within the nation or region concerned. But there is also a case against it. All universities, given the recruitment process, tend to develop departments with particular preferences in theoretical content and orientation. In islands universities, being small, this is accentuated. Many staff of political 'science' and sociology departments are committed activists for one political party or another. Far from countries of the South Pacific feeling that the teaching of these subjects at Pacific institu-

tions facilitates understanding, there is a concern lest students should be indoctrinated with particular ideologies and interpretations.

Disciplinary boundaries

There has been considerable progress in the world in relaxing the artificial compartmentalisation of knowledge known as 'disciplines'. Although Pacific institutions adopted the boundaries set abroad, it is hoped they will not feel too bound by them. In practice, the smaller the nation or organisation, the more individuals need to be multi-functional in their activities, whether at work or in private life. And the more multi-functional the needs, the more inter-disciplinary or preferably non-disciplinary studies are to be valued.

Non-academic factors

Since the focus of most post-secondary institutions is the qualification achieved, there are considerable advantages in building some non-academic factors into the curriculum. For example:

HEALTH AND PHYSICAL FITNESS

It is common in many countries for sport or some other form of physical exercise to be an essential component of post-secondary programmes. Though not usual in government-sponsored institutions in the Pacific, it is worth considering as the adverse effects of poor nutrition and ill-health on learning are well documented. The Pacific Adventist College is known for its emphasis on student nutrition and health, and also for educating students in these matters. For many of the less well-endowed institutions, however, this is not so. While many institutions cannot supply these services for non-residential students, there is a case for including some education on nutrition and health in the curriculum of every student.

CREATIVE EXPRESSION

As with physical fitness, some institutions include an element of music, art, drama or other creative expression in their study programmes for all students. In a rapidly changing world, anything that can be done to improve creativity is worth while.

ETHICAL TRAINING

A high proportion of post-secondary education in the Pacific is sponsored by churches and church colleges give considerable emphasis to ethical training. There are cases where it is focused on narrow sectarian lines which is a subject for concern. But in the government institutions ethics tend to be avoided as too difficult, too personal or too likely to be tied to dogma. Students are faced with a barrage of ethical systems: from traditional cultures; from their own and sometimes very different and apparently conflicting religions and ideologies; from radio, television, journals and other media. It is hard to make sense of it all, and it seems to us an obligation of post-secondary institutions to assist their students to examine, digest and distil the best from these varying systems. This does not imply indoctrination: on the contrary it implies helping students not to be vulnerable to indoctrination from any source, including the teaching staff, so that they are able to make mature decisions about the ethical issues they will face. Sippanondha Ketudat (1990 pp.24-5), former Chairman of the Thai National Education Reform Commission, considers it vital that 'our educational institutions be so shaped as to create people who are both expert and ethical... in short ... a culture change such that the ordinary people will find a leader unacceptable unless he or she is demonstrably both expert and ethical'.

ENGENDERING MOTIVATION

Perhaps this should be part of the overall programme, but often it is not. Specific consideration might be given to increasing levels of motivation along with other aspects of students' personal development. Some highly experienced educators in the islands have told us that requiring a financial and physical contribution from students, and integrating study and work more closely, would go a long way towards improving motivation.

Qualifications

While all around us we see the emergence of sharing rather than exchange transactions in information, most universities

> jealously guard credit as the sacred element in their educational rituals.
>
> ... universities continue to talk of teaching hours as a key ingredient in their economic planning. I would suggest that learning hours is a better concept, for it opens up the possibility of self-directed and other forms of learning and growth (Morrison, 1989 p.6).

Value of qualifications

An international training consultant with extensive experience in the Pacific, noted that 'diplomas, certificates, letters of participation, etc. carry great psychological value in the Pacific Region – there being a less cynical attitude towards them than in the more developed countries' (Burns, 1988 p.62). The reason is no doubt their scarcity until recently. As the qualifications proliferate presumably the value, or at least the mystique, will also wane. This is good to the extent that people become valued more for the quality of their work than for their qualifications. Qualifications are, however, much easier to measure objectively than quality of work.

Spacing of qualifications

The generally better starting salary for those with higher qualifications gives an extra incentive for students to emphasise qualifications over experience. However, there would seem to be a strong case for students obtaining practical experience between qualifications. This is increasingly the policy of islands governments, and even more so of private employers.

International acceptance and marketability

Students and their parents want qualifications that are as widely recognised as possible, as these facilitate higher salaries, higher status, mobility and migration. The main exception to this general desire for an internationally marketable qualification is when it is considered to be too difficult to achieve. Other motivational factors also need to be considered.

Governments, on the other hand, are faced with conflicting goals.

They want high quality services and the prestige of high quality institutions. But having low per capita incomes they cannot compete with richer countries in terms of salaries and conditions. Moreover, there are strong political pressures to give priority to local citizens. Internationally accepted standards may mean the loss of the most skilled local staff, trained at high cost. The choice is often to replace them either with expatriates, or with local staff whose qualifications do not enable them to compete beyond the security of their national or regional institution.

There is great variation between countries, ethnic communities and disciplines in this. Many governments prefer qualifications that are not widely marketable as this induces graduates to return home and accept more modest conditions. It is a very difficult policy decision. For example, the FSM qualification in medicine is less widely recognised than qualifications from Australia or New Zealand: those who qualify are more likely to be retained, less likely to emigrate.

Likewise, many medical students from the north Pacific who trained in USA wanted to remain and practice there. This was a major reason for setting up the Pacific Islands Medical Training Centre in Pohnpei for the islands of the north Pacific. Dr Carleton Gajdusek, a Nobel Prize-winning physician who specialises in the Pacific, informs us (personal communication) that students at that Centre, where teaching is provided by the University of Hawaii medical faculty, learn as much as those at most medical schools in USA. The islands governments wanted the Centre to produce the skills but with non-transferable qualifications. The Centre is available at present only to countries and territories with close links to USA, which finances the programme.

Veterinary qualifications from the Philippines involve lower academic standards in the sciences than the equivalent qualifications in the high income metropolitan countries. But we are informed by some experienced people in this field that the Philippines training involves more practical experience, and that its graduates are as good in the regular work as those with the more academic training. Some Pacific governments prefer the Philippines graduates as their qualifications are not recognised in the metropolitan countries and

they thus will not migrate.

While in principle we advocate Pacific people having the highest possible quality of education, we sympathise with governments which opt for lower quality where it is the only way to retain staff for essential services.

Accreditation

As noted above (page 52), an increasing proportion of knowledge and experience is gained outside institutions, from books, newspapers, journals, audio tapes, video cassettes, computer software and television. Most courses in institutions are designed on the assumption that students begin from a common base and must cover a given area of new knowledge over a set period. The growing need is for institutions to be able to take students in with varying amounts of pre-existing knowledge, and to offer appropriate examinations and other testing and certifying facilities, in addition to the routine requirements for those who follow the conventional path.

Setting up facilities for independent examining and certifying is important for the many students who are motivated through self-teaching course packages. Nowadays not all students need tuition, and the vast majority of Pacific islanders are out of reach of it anyway. Most students studying by extension in the smaller countries receive very little tuition. In the Cook Islands, for example, only for USP courses for which there is a minimum of eight students on any one island is a tutor provided, and in practice that means very little tuition for any island except Rarotonga, and only some there. Tutoring for those who get it is estimated to average not more than ten hours per semester. The satellite system, once thought to be crucial, is not used for lecturing, nor for tutoring in most courses. At least half of the assignments are not received back by the students by the time the course is over.

External examinations

There is a tendency in many post-secondary institutions to resist external examinations, particularly on the part of less secure and

lower quality staff who often rationalise such resistance in terms of being 'colonial' or 'dependent'. High quality staff, however, usually welcome the stimulus and experience gained from the process.

UPNG had a comprehensive system of external examiners, but abandoned it. It costs money, although external funds are usually available to pay for it. The cessation of the system has been associated with a decline in quality. At USP the role of external assessors has been changed from checking examination scripts as well as reviewing all aspects of the courses, to simply reviewing. This is useful, but not as valuable to the students or the institution as independent examiners, even if only for a proportion of the materials. The South Pacific Board for Educational Assessment (see page 61) deals only with primary and secondary schools. There is a case for them to consider post-secondary studies also, though the benefits of such a system would be greater if a wider range of countries was involved in a network for post-secondary education.

CROSS-CREDITING

This is increasingly necessary owing to high mobility in the Pacific. Accreditation is best done between the countries which interact most. It is not quite as widespread a problem as is sometimes assumed. However, there is often a feeling in the region that particular qualifications are or are not officially 'recognised' elsewhere. In some cases this is true, but more often it is not. For medicine and law, for example, most countries specify which other countries' degrees they accept, and have procedures requiring further training or assessment for those with qualifications from elsewhere.

But for most people with general degrees, it is up to the employer in the country concerned whether they will employ them. Governments often have rules on these matters for civil servants, but private employers hire much more on track record and assumed quality of work.

Institutional specialisation

There is scope for more institutional specialisation across the region and beyond. Thus one effective means of heightening regional

awareness and interaction is by various countries offering some course or courses for the region or part of it. This could be both for residential students and by extension. This would be facilitated if the extension centres of USP were to be owned and controlled by the country concerned, and could provide a mechanism for any institution (or in some cases individual) in that country to send out or take in courses from neighbouring countries. It is this kind of balanced, co-operative regionalism, based on the networking of equals, that the Council on Pacific Education (COPE), the Hawaiian-linked council which provides resources from USA and Japan for science, mathemematics and computer education, aims to facilitate among its member countries – American Samoa, Western Samoa, Tonga and the Cook Islands. Countries within the Pacific Islands region are, however, generally short of resources so confining such linkages within the islands is likely to be counter-productive. Most benefit could be obtained by casting the net much wider.

The question of quality

A strong correlation seems to exist between the quality of education and the economic success of nations and communities. Economic success creates the opportunities for better social services and improved quality of life. On the basis of extensive research on the competitive advantage of nations, Porter (1990 pp.628-9) concluded that education and training were decisive factors, and must be of high quality, demanding 'high performance'. This is particularly so in those sectors of education which are relevant for the economy, for example, science, technology and accounting.

Throsby and Gannicott (1990 pp.iii et seq.) likewise note that 'it is now well established that the pay-off to quality improvement is high'. This seems to be one of the most important issues of all, because there is too often a tendency to equate qualifications, rather than the quality of them. As noted above, some Pacific governments have found it necessary to send staff who already have a degree from one university within the Pacific islands to do the same degree again at another further afield, because of inadequacies in the

quality of the former.

Henderson (1990 pp.147) reported that one of the main 'question marks in several regional capitals over USP' was the quality of teaching staff. The indications are that similar concerns are held about other post-secondary institutions in the region. To some extent there are questions about quality everywhere in the world, most of them very hard to answer. Problems in the Pacific region include: most students and many staff are working in a second language; extensive higher education has only recently become available so that regional staff lack the length or breadth of experience that would be normal elsewhere; and selection tends to be from a very small pool.

This is a difficult area in which to find objective data. One item is in the 1987 tracer study and evaluation of the New Zealand-funded scholarship scheme from Samoa to New Zealand 1962-1985, and to USP since 1970 (Annual Report, Appraisal, Evaluation and Analytical Support Unit, Ministry of External Relations and Trade, Wellington, 1987). The pass rate for the Samoan students in New Zealand over the period was only 47 per cent. We do not have figures for Samoans at USP but estimate it to be about 80 per cent. It is unlikely that the difference is due to cultural differences since there are many times more Samoans in New Zealand than in Fiji, and many more Samoans at most New Zealand universities than at USP (460 at University of Auckland alone in 1991, as compared one quarter of that number at the main USP campus). The report notes that it is cheaper to get Samoan students through degrees at USP, but also notes the resistance of many Samoans to that option.

Another less measurable indicator is that Cook Islanders can take extension courses from either USP or Massey in New Zealand. Very few take the latter option. The main reason students give for the choice is that they consider it easier to pass at USP. Discussion with persons closely involved with standards at UPNG, UNITECH and NUS, indicate that academic standards at those institutions are probably not as high as at USP.

There is a popular impression in the region that there is a hierarchy of quality, equating the lower levels with national institu-

tions, middle levels with regional, and highest levels with institutions outside the region. There may be some truth in it for the government-sponsored institutions at least, but there is no necessity for such a pattern, and there are many exceptions to it in institutions, subjects and personnel. Nevertheless, it remains the perception of most students and officials that we have contacted, and it is reinforced by a glance at the qualifications and experience of staff at the respective institutions, the incentives offered to staff, and other criteria.

Quality, we believe, can best be attained by use of the highest quality staff and institutions available. That will necessitate hiring the best quality staff for institutions in the islands, establishing linking arrangements with quality institutions abroad, sending a good proportion of students abroad (but only to high quality institutions), establishing staff and student exchanges with quality institutions, and localising only with persons of the requisite quality.

Student and staff mobility

When USP began, an exchange scheme was set up with UPNG, and attempts were made for students to take one semester of their years of study (usually four) in a metropolitan university. This included trying to persuade the East West Center in Hawaii (and other donors) to offer eight scholarships for one semester instead of scholarships each for four years study (or whatever the equivalent costs allowed). The Pacific contains some of the world's smallest societies in close interaction with some of the world's largest. For those undertaking most of their studies in an islands university, some exposure to a metropolis and its university would be beneficial. But aid donors and institutions place high priority on putting their stamp, their award, on a student, and anything less than that has not been attractive to donors. Perhaps in the 1990s they can be persuaded to change that philosophy.

There is also a strong case for attracting exchange students from the larger countries to the islands. USP has the best range of such schemes, mainly with USA and Japan, both very important connections. Expansion of such two-way opportunities throughout the

region and with the larger countries would be beneficial. The new UMAP (University Mobility in Asia and the Pacific) programme being co-ordinated from the Australian Vice-Chancellors Committee office in Canberra is another promising example. Many secondary schools in the islands also have international student exchanges, as do some primary schools. Two groups of Cook Islands primary school children are at the moment of writing preparing for exchange visits: one to Japan and the other to New Zealand.

For students who will have a period abroad, at what age is it most useful? Margaret Mead was of the opinion that better value was derived from two or three years at a high quality secondary school in another country, than the same period at university abroad. Her reasons related to the acquisition of basic patterns of language and logic, and she exemplified the claim with the high success rate in later life of the small number of Papua New Guineans who were sent for secondary schooling in Australia. Research on this question would be merited, and it may be more effective and less costly to devote overseas scholarship funds more to secondary students and less to tertiary.

Staff exchanges are also beneficial to both staff and students. USP and UPNG have been able to arrange more than most, but there is a case for expanding such exchanges for all institutions.

There is a good case for not doing more than one qualification in any one country, let alone in any one institution. The smaller the country and the institution, the more this is so, as a student learns not only from the classroom, but also from the wider context. Since most higher degrees are funded by external donors, it might be worth asking donors to make it a condition of scholarships for second qualifications that they be to a different country and institution from that in which the student studied before.

Fortunately, there are better prospects for achieving this in the Pacific than elsewhere in the world. Many countries receive more offers of scholarships abroad, especially for masters level courses, than they can accept. Pacific Islands universities would likewise be enriched by taking more foreign students from Pacific Rim nations

or from further abroad. The University of the South Pacific and University of Guam have been the most successful so far in this regard, and the scope for expansion is considerable.

Management

Decision-making forces and options

EXTERNAL

The extent of choice for islands nations is limited by bilateral and multilateral aid donors. Foreign aid has paid for the building of all post-secondary institutions in the region and contributes to the running costs of most. Thus, donors have considerable leverage and national initiatives can usually only materialise if they are supported by metropolitan countries or international agencies.

The two countervailing forces have thus been the individual countries, most of which want to undertake more on a national basis, and the main donor countries which, having planned and financed the University of the South Pacific and other regional institutions before the member countries gained independence, tend to resist the aspirations of individual countries. The donor nations also see greater political advantage in maintaining the islands together. They encourage interaction between nation and region only when the nation is seen to be subordinate to the region. Competition, which may be of great value to all parties, is strongly discouraged.

It is because of the power of external donors that most of the proposals of islands governments for national universities have not materialised. The National University of Samoa, established against the advice of potential donor countries, was for years effectively confined by them to largely sub-degree courses. One of the authors was assured in Japan that they allocated funds to build the National University of Samoa, but were persuaded by the Australian and New Zealand governments not to proceed as it was their policy to require Samoa to use only USP within the region. The decision of the Tongan government to have its own university was likewise changed by pressures from the aid donors to conform to a model

more congenial to them. Samoa's action did, however, precipitate some activity by the aid donors in assisting post-secondary colleges in other countries, provided they remained below USP's level.

Regional

Within the region, disproportionate leverage lies with the host countries of regional institutions. This is not only at the level of formal decision-making structures, but even more in staffing and 'gatekeeping'.

Almost all regional educational programmes and institutions focus on the higher levels of education, with consequently higher unit costs. All depend on external assistance for capital, expertise and operation. The countries with the greatest needs are least able to tap these higher education resources. The countries with least need, i.e. those which already have the most resources available to them for higher education, are the best equipped to siphon off the resources available to the region through external subsidies, more specialist personnel, personal connections and other linkages.

The example quoted above (page 64) showed that the Cook Islands derives 27 times more benefit per capita than Solomon Islands from the USP extension facilities. Further examples could be taken from many programmes and institutions, showing that the centralist approach to regional co-operation in higher education has in many cases widened gaps and left the poorest at a relatively greater disadvantage. Moreover, the most disadvantaged are least able to represent their interests, for the major influences, sources of advice and opinion, and presenters of what is portrayed as 'regional opinion' are overwhelmingly those of, or most closely identified with, the host country of the institution concerned.

National

Within nations there has been some broadening of participation in decision-making about higher education. The tendency for political leaders and planners to invite fuller participation from private firms, the professions, trade unions, churches and voluntary organisations, is a positive trend. Does it pay to formalise this further? In a nation as large as Papua New Guinea there is no doubt a strong case for

the establishment of its Commission for Higher Education. For smaller countries, however, we would be reluctant to recommend an additional bureaucracy, with its inevitable extra costs and often extra delays. There may be a case for at least a Committee on Higher Education, involving representatives of the government and from the wider community. In countries such as Solomon Islands or Western Samoa, for example, it may be worth considering widening the functions of the council of the national college of higher education or university to encompass this role. One caution, however, is the danger that the council may see its first role as protecting its own institution, rather than looking at the long-term welfare of the national population.

The limits of manpower planning

Manpower planning has a role, but there is a danger of it being overplayed. In the 1960s and 1970s, it was seen as the panacea for many ills of higher education. In the hope that it would help the Pacific avoid the problems of other developing regions, USP asked the United Kingdom to send their top expert in manpower planning in the Third World to offer advice. His basic message, based on years of involvement in many countries, was that there was no reliable formula and that earlier assumptions had not proved valid.

Manpower planning took a lower profile for a time, only to surface again, refurbished in practice a little and in rhetoric a lot, under the title 'human resource development'. It is sensible to have information about labour markets, employment trends and opportunities, and education and training options, to inform decision-making. But we have seen this goal translated into more bureaucrats and less education in more than one country, and are therefore cautious about devoting excessive resources to too much formal planning.

Before relying too heavily on the HRD approach, it might be noted that those Pacific graduates who have succeeded best were educated in the institutions not covered in any manpower plan, i.e. Pacific Adventist College, Brigham Young University, Divine Word Institute or Atenisi, through self-study, private arrangements

abroad or in private firms. Providing education which facilitates self-reliance, responsibility, initiative and adaptability may be even more important than planning.

Monopoly and competition

Much of the world came through a phase, particularly following World War II, when it was considered that monopolies (or quasi-monopolies) were the appropriate basis for educational systems. It derived from a central planning approach of demarcating a task and a territory, and allocating a monopoly over both to an institution or system. Students were channelled in by zoning, scholarships or otherwise.

In education as in other walks of life, the monopoly approach has been increasingly questioned in the past decade, though it remains attractive to some aid donors and international agencies, and to institutions that benefit from it. It is usually justified on the basis of economies of scale. The high cost and often low efficiency of many government and private monopolies, however, led to the abandonment of many of them in the 1980s, in the South Pacific as elsewhere, making us aware that the argument for 'economies of scale', while superficially attractive in principle, can be fallacious in practice. While 'wastage' is often assumed to be avoided by monopoly, in practice wastage and inefficiency is often greater in monopolies. The monopolistic approach to higher education would not seem to be appropriate for the coming century. A wider range of options and more competition between institutions of learning, both within nations and beyond national boundaries, is likely to benefit students and nations.

The monopoly question also arises in relation to the allocation of scholarships. A single allocating authority was usually set up for each nation on the assumption that national criteria would be applied uniformly. But as Malama Meleisea noted (in a submission to the Henderson Review, April 1990) 'It is not unknown for scholarships to be used in exchange for political favours'; and a Pacific-wide meeting of public service commissioners in the mid 1980s was of the view that political or relationship pressures were the greatest

problem in the allocation of training opportunities. In other words, while a single system may be theoretically equitable, it can also be vulnerable to bias in selection criteria due to political, kinship, ethnic or other connections, as well as on more 'objective' grounds such as manpower planning projections.

Some of the most outstanding Pacific Islanders – in particular some of the most creative – would have been lost in such a process. We therefore recommend a wider range of processes. For example, the Australian Equity and Merit Scholarship system was designed to overcome these problems by keeping the selection process outside the country of the applicants. This was popular with applicants but unpopular with those governments which wanted to maintain monopoly control, not only of scholarships paid for by their own governments, but also of those from other sources. We used to favour the monopoly argument, thinking that it was in the national interest, but have seen kinship, political and other interests overcome objectivity sufficiently frequently to favour a more dispersed system, such as one whereby each scholarship source sets its own selection criteria.

In view of the increasing complexity of sources of education, it would be helpful if ministries and others could give higher priority to helping students and the public become more aware of all the potential opportunities and of ways of choosing between them. There have been impressive advances made in some countries with the establishment of careers centres, usually in a room set aside in the secondary schools. In some cases these offer comprehensive information on further study opportunities available at home or abroad, on a full or part-time basis, residential or by distance methods. This information would be helpful for both personal and national development and needs to be available to the public as well as to senior high school students. Perhaps an information centre set up in town, run jointly by the ministry of education and the chamber of commerce or the local government council, would be merited.

Size and critical mass

Critical mass is a dubious term, to be used with caution in the Pacific. It was used by many colonial officials, international agency experts, and even indigenous leaders, to explain why no Pacific islands territory could ever become a constitutionally independent nation. Since then, almost all of them have done so. Likewise it was the 'logic' used to justify a single regional airline as more than one would be 'uneconomic', and not have the necessary 'critical mass'. In fact the single regional airline was uneconomic, and it greatly disadvantaged all countries except the one where the headquarters was located. Each country now operates its own airline.

The concept of 'critical mass' needs to be re-evaluated in terms of the geographical spread, national and ethnic diversity, and very real restrictions on effective mobility in the Pacific. Also the post-secondary institutions which we find are much the most cost-effective, as well as being academically good, would be regarded by those concerned with 'critical mass' as non-viable. They have only 200 to 2,000 students and see their smallness as one of their advantages, correlating with quality of the educational experience. For example, Brigham Young University, the largest of these, has a ceiling of 2,000 students. It turns large numbers away, even though it has ample funds and facilities (it is the best funded university in the whole region), because it is convinced that with over 2,000 students the quality of education would decline. The Divine Word Institute, with about 400 students, achieves high academic standards in degree courses in accounting and management, communication and other fields, and does so at low cost. The other small institutions likewise see smallness as correlating with quality. They also produce quality at a much lower cost than the larger institutions. Quality in post-secondary education depends on a range of factors – it is not a correlate of size.

The conventional wisdom can change quite rapidly. It was the 'logic' of advocates of 'critical mass' that one university campus (The University of Auckland), was the 'right' size for the city of Auckland (population 750,000 – the same as the national popula-

tion of Fiji). Yet within the past three years this has changed so radically that there are now five campuses: University of Auckland main campus; University of Auckland Tamaki campus; Asia-Pacific International University (new and private); Auckland University of Technology (formerly the Auckland Institute of Technology); and the Auckland campus of Massey University. Others are being considered. The conventional wisdom was so firmly established that needed change was long delayed. When it came it was radical. The University of Auckland naturally fought strongly against the breaking of its monopoly, yet now that it has been broken many of its faculty (including one of the authors of this study, who is Director of the Centre for Pacific Studies at the University of Auckland), accept that the people of the city are much better off with the wider range of choice and options, and for the stimulus that the competition has given to the formerly monopolistic university. We believe some equally radical rethinking is due in the Pacific islands region.

It would also seem to be the case that where economies of scale have channelled the benefits of centralist regionalism to countries with better leverage, most nations have been left worse off than they would have been if equivalent resources had been devoted to nationally-based solutions, using a mix of national, regional or international facilities.

Where larger scale is considered desirable this can be achieved in small countries by, for example:

- joining diverse forms of training in fewer institutions within the nation
- joining with other countries in a single institution
- networking with other countries using a mix of one's own and others' facilities (including the use of two-way extension and summer schools)
- sending students abroad to institutions with which the countries are not involved.

It is not a question of which, but of how much of each.

Consolidation, decentralisation and centralisation

There is a tendency for applied courses to have been begun by government departments (e.g. nursing in health, teacher training in education), and over time to have been consolidated into specialist educational institutions. While there is a case for this, the specialist departments tend to resist the trend and feel that they can do a better job (e.g. of training nurses) in-house. We feel that the aim should not be either/or, but both. To take the example of education, this now pervades every sector (see the Cook Islands case study pages 64 to 81) and it can be counter-productive to pull it out of the places which made it part of the life-blood of their organisation, and segregate it in strictly educational institutions.

One problem of consolidation is that it can lead to a plethora of committees and procedures that slow down the productivity and effectiveness of the overall educational process.

It is a task of great skill to combine the advantages of larger scale and potential interaction, with maintaining a learning culture. Structurally, a community college needs to be separate from any one ministry (e.g. education, health or the public service commission), but involving the fullest possible participation of all concerned. Each ministry and each private organisation will still need to be as independent as possible in promoting training (in the specifics for that work), and education (in the broadest sense for personal and community development) throughout its operation. No university, polytechnic or community college can handle the whole complex range of opportunities, knowledge and skills necessary for today's world.

Thus the banks encourage their staff to use the universities, community colleges, bankers institutes and other formal learning institutions but they also operate their own in-house systems on an even larger scale. We wish they would also encourage personal learning and creativity beyond those limits. Diversity, openness and choice seem to have greater potential than monopolies.

In Papua New Guinea, as discussed on page 13, some post-secondary institutions draw students from throughout the nation,

others serve particular localities. Most teach a distinct speciality, for example, teacher training or agriculture or commercial studies, although there have been discussions about amalgamating some into community colleges. Fiji has drawn most, but not all, of its specialist colleges into the Fiji Institute of Technology, although a number are on separate campuses. The Solomon Islands College of Higher Education is a similar plan for consolidation, although it plans to draw the separate facilities together on a single large campus. The National University of Samoa was intended to draw together the teachers' college, technical institute, and possibly other programmes, and to take back the Alafua Campus of USP (the USP agriculture campus was formerly a national facility and still belonged to the Samoan government). External pressure was applied to stop these plans.

The Tongan government had decided to establish a National University of Tonga, but aid donors were only prepared to assist if it were a Community Development and Training Centre feeding into USP. This was set up in 1985. In 1991 Tonga decided to make another attempt to set up its own institution for diploma and degree studies. The Cook Islands proposes an Institute of Higher Education, consolidating the present teachers' college, college of nursing, apprenticeship training and other facilities plus some new ones. A team is currently working on the proposal, but no decisions have yet been taken.

Throsby and Ganicott (1990) note the potential for improved performance in schools as a result of decentralised management. For most post-secondary institutions in the islands this is not an issue, for example, most countries have one teachers' college, one nursing college and so on. The main instances where it does apply are PNG, with its relatively large population and fragmented environment, and USP, where all significant decisions are made in Suva and participation in the process by persons from the other member countries is in most cases marginal.

Centralisation on the capital of each country or territory is equally apparent in dependent territories such as French Polynesia and New Caledonia (with a combined population of 350,000). France

decided, for reasons of 'economies of scale', to establish one university on one campus in New Caledonia for its Pacific territories. Had they done this when President de Gaulle announced it in 1966, it could have worked for a time, because France then exerted more centralised power. But by 1988 they found such strong pressure within each territory for its own institution or at least its own campus, that two campuses had to be built. Each teaches some of the same courses but each specialises in others, and in that way serves both territories.

The same debates about centralisation and decentralisation apply regionally as nationally, with strong pressures for action on a regional basis coming from aid donors, international agencies and hosts of regional institutions. But there are major differences between centralisation within a nation (usually focused on the capital) and centralisation involving a group of countries. The significance of these differences was not foreseen when the central institutions were established.

For example, whereas citizens of a country are free to travel to the capital to study or work at a national institution, only those of the host country are free to do so with a regional institution. Travel is restricted by permits which can be revoked at any time without notice or explanation. For those students who are married and need full or part-time employment for spouses, or for themselves, the prohibition on work is a serious issue. For these and other reasons, the opportunities for study, employment, economic gain and other benefits accrue mainly to the host country and its people.

The main arguments in favour of centralisation are:

- more efficient use of facilities and staff, thus achieving economies of scale
- it brings islanders together
- it encourages participation by islands governments in the policy-making of the institutions.

These arguments would be stronger, the regional/national

balance would be healthier and the benefits from regional education more equitably spread, had there not been the pressure from donors and staff at the power centre, to centralise. If the resources had been allocated to member countries they could have insisted on a more equitable spread of both physical plant and benefits, as a condition for contributing to regional networks.

The main arguments against centralisation are:

- the creation of higher levels of complexity and bureaucracy
- the concentration of real power at the centre
- the subordination of specialised needs to a centralised system which can become highly politicised.

Moreover, there is a danger of forming 'clubs of the weak'. When some islands heads of government wanted to form what became the South Pacific Forum without larger powers, Prime Minister Ratu Sir Kamisese Mara said Fiji would not participate as it would be a 'club of the weak', i.e. they could make pronouncements, but did not have the wherewithal to do much about them. They needed to identify with countries with which they most interact, and which would contribute resources to enable proposals to be turned into action. They did so, relative to the balance of power of that day, and the Forum has been outstandingly successful.

The centripetal forces drawing powers over educational and other issues to the centre become countered to a greater or lesser degree by centrifugal ones pulling them back out. The more democratic the nation, i.e. the more effective the political representation, the more this will happen. Particularly in the larger countries with provincial governments, there are strong pressures for equitable distribution of physical facilities, student places, employment opportunities and other benefits. However, while some decentralisation does takes place, the forces of centralisation are stronger: as some functions are decentralised, new ones are established in the centre.

Retention rates

These show that managers of education systems can have only a limited influence on retention rates and that too much emphasis on retention has its own costs.

Most Melanesian graduates will return to work in their home countries, wherever they are trained. That applies a little less to Fijians than to other Melanesians. Polynesian graduates, on the contrary, are more likely to leave their home countries, no matter where they are trained. The graduates most likely of all to emigrate are non-indigenous, with the highest rate probably among the Indians of Fiji.

The crucial issue for those who would like to emigrate is access, and education abroad increases that. The pressure to emigrate among islanders is greatest among Samoans and Tongans. Samoan scholars in New Zealand from 1962-1985 stayed away from Samoa much more than those who studied at USP, although the study does not show to what extent this was due to lower pass rates in New Zealand (Annual Report, Appraisal, Evaluation and Analytical Support Unit, Ministry of External Relations and Trade, Wellington, 1987).

Cook Islanders have free access to New Zealand and Australia at any time, so they are the best control group. A study of all Cook Islander graduates until the end of 1986 (Crocombe, 1990 pp.242-3) showed no significant difference in retention between those who studied at USP and those who studied in New Zealand. The Cook Islands is important too for illustrating that the 'brain drain' is more a question of access than of qualifications. Whereas about 75 per cent of all Cook Islanders live abroad, only 24 per cent of graduates do. For Indian people from Fiji the opposite is the case, with more graduates emigrating, but this is because graduates are more acceptable to the receiving countries.

The crucial issues in graduate emigration are the profession chosen and where qualifications are recognised. Cook Islands doctors with a New Zealand or Australian qualification are much more likely to stay there than those with a qualification from the

Fiji School of Medicine, who have difficulty having their degree recognised abroad.

There are advantages in having people working abroad. Most send money back. Western Samoa, for example, would have a much lower standard of living today were it not for remittances from Samoans abroad: these constitute the nation's largest source of income. Many of those working abroad make it possible for their relatives also to be educated abroad to a better standard than at home, thus relieving the national system and providing better trained people. A number return later in life, having acquired valuable experience abroad. (This is more apparent in the eastern Pacific where the tradition of going abroad for education is more established. It is likely to become more evident in the western Pacific in the coming decade.) Those who have been educated and worked abroad also provide a system of linkage and leverage with the larger nations on which the islands states depend for supplies, technology, information, financial and technical aid, and political support.

For all islanders to be educated in the islands would leave them vulnerable. The Minister of Education of Tonga, Hon. Langi Huakavamoliku, has consistently sent students abroad, as far as possible to countries with which Tonga has the most interaction.

Tuvalu in the 1980s had six qualified ships captains. But Tuvalu is very small and has only one ship. Why should those persons who became captains (and were then commanding ships working ports in Australia, Fiji, Kiribati, Papua New Guinea and Vanuatu) be denied the opportunity? Prime Minister Toalipi Lauti said he was happy to see his citizens working abroad as captains – most Pacific Islands seamen who work abroad are deck-hands. Captains abroad, he said, helped the country in many ways.

Retention is not only a matter of access abroad. It is also a matter of conditions at home. We know Papua New Guineans in post-secondary education who work abroad because of the law and order problems at home. Educators cannot do much about these problems, but national governments can.

Staff management

RECRUITMENT AND RETENTION

Almost all Pacific institutions claim to appoint exclusively on merit, but this is seldom the sole criterion. The most common other criteria are citizenship and cost, often also ethnicity and sometimes political orientation. If quality is the goal, merit needs the highest priority.

Staff from further afield, and particularly from high income countries, are generally more expensive. The higher cost of recruiting from outside the host country restricts the extent of international recruitment, as do problems of security of tenure, restrictions on speech and other limitations. On the other hand, in some cases there are incentives for the appointment of foreign staff, particularly when a donor agency pays some or all of their costs.

All government-sponsored institutions in the islands have a practice, and usually also a policy, of localisation. The term 'regionalisation' is used in regional institutions, but the process is in practice largely one of localisation, with citizens of the host country being preferred, owing to selection mechanisms and constraints on staff mobility. But the pool of highly educated manpower is small. The smaller the pool of qualified talent, anywhere in the world, the lower the average quality must be.

Immediately following independence a strong preference for localisation was understandable, but how much priority is to be given to localisation where a higher quality non-local applicant is available? The world's highest quality universities aim to recruit from a wide pool of talent. Students and long-term national interest usually favour quality too.

The country of origin is also likely to be a factor among those recruited from abroad. Pacific people have been in close interaction with Australia, New Zealand, USA and the United Kingdom, and this has been reflected in the expatriate staffing of educational institutions. For the coming generation, however, much more needs to be known about Japan, China and Korea, as these are becoming major influences on the region. Recruiting staff from those countries would be advantageous to students and the Pacific nations.

CONSTRAINTS ON RECRUITMENT

Probably the most critical constraint on external recruitment and retention of staff for post-secondary institutions in Papua New Guinea is the safety of families. It is beginning to cause the loss of national staff also. Government efforts to overcome law and order problems have had limited success. Personal security has also become an issue in Fiji. Solomon Islands and Vanuatu, for example, with no university of their own, have had to fly their students out of both Papua New Guinea and Fiji for security reasons – most recently from Papua New Guinea in June 1991.

The way that governments can act as a constraint on staffing has been demonstrated particularly in Fiji since the military coups of 1987. All other governments repatriated their students from the regional post-secondary facilities in Fiji, and sought alternative sources of education for them. However, the donor countries which supplied the scholarships offered to finance their return to Fiji, threatening to cancel the scholarships if they tried to go anywhere else. Academic freedom was promised by the host government, but was not honoured, with at least one staff member being tortured and a number assaulted by members of the security forces. Faculty have been officially warned of unspecified limits to academic freedom and of the government's ability to withdraw work permits without disclosing a reason.

The Government of Fiji made provision for its citizens who teach in national post-secondary institutions to have a 'Certificate of Suitability', requiring a security (in practice political) clearance. This was not applied to USP – one advantage of a regional institution. How far the criterion of political 'suitability' was applied in practice in other institutions in Fiji is not known, though many feel that political criteria became more important.

Whereas most countries permit long-serving staff to apply for citizenship, and all the metropolitan countries where Pacific islanders work do so, the Fiji government's policy is not to count service for the USP as 'residence', thus inhibiting staff from countries other than Fiji from obtaining citizenship, voting rights, security of employment, rights to work for spouses and children, and other

standard provisions.

UPNG requires all non-citizen staff to sign that they will not do anything 'that may be construed ... as being involved in the politics of PNG'. Publishing is also subject to restriction; a provision introduced after a highly respected economist queried aspects of economic policy in a way which would be a daily occurrence in most industrialised countries.

Post-secondary education in the Pacific has been concentrated in the two least politically stable nations. The main lesson is that regional educational resources would be better spread rather than concentrated.

Further constraints on recruitment are the cost of mobility between islands nations and immigration restrictions. No country allows free mobility of staff or students from neighbouring islands states. Study and work permits take time to issue, contain restrictive conditions, can be revoked at any time, and are a disincentive to regional staff. Moreover, students from the other countries of the region, and their spouses and children, are not normally allowed to take full or part-time work. The restrictions imposed within the islands region are generally much more severe than those in the metropolitan countries where some Pacific staff choose to work. If high standards are a priority more action is needed to ensure that staff and students are free to move to places where the opportunities are available, and are treated equally once there.

Staff Training and Professional Development

The region is fortunate in that funds have been available under aid programmes for staff training, mainly in metropolitan universities. To maintain high quality teaching standards for students, staff should be sent to universities of the highest quality. This has generally been done, but for reasons of time and cost there is sometimes a tendency on the part of the persons concerned and their institutions, to go to the university which will give the qualification in the shortest possible time. This may be counter-productive in the long term.

The fact that the funds are often tied to external institutions has

some advantages. Being trained in the same university in which they themselves were taught, and where they will later teach, is likely to provide a narrow experience for staff.

There is sometimes a tendency to assume that anyone can be 'trained' provided they are given the opportunities. Especially when a new institution begins, there is strong pressure to appoint persons of less than ideal qualities and send them for training. In such cases we believe that it is better to make alternative arrangements until staff with first class potential are available. Once appointed, they are likely to be there for a long time.

Funds for short courses, attendance at conferences, and participation in a range of experiences have also been relatively freely available from external sources. This is very desirable in a highly interactive world. As many such awards and invitations are given by nation and/or institution, the smaller the country and the institution, the more it is likely to receive these opportunities. Sometimes the opportunities are so frequent that if all were to be accepted the teaching programme would be disrupted.

Such funds, however, tend to go disproportionately to the highest level institution of that country or region, and much less to the others. For example, national teachers' colleges are vital institutions and have an urgent need for top quality and internationally aware staff but they often find it harder to obtain the necessary resources than universities do. There is also a tendency for external funds to go to government institutions, whereas we feel there is a strong case for them to be shared equitably with private colleges and universities.

In situations where salaries are relatively low and the cost of living high, many staff feel they cannot afford to buy books, subscribe to journals, or maintain membership of international professional associations. In view of the value of these for quality teaching and for keeping up to date, we believe there is a strong case for a tied allowance, in addition to salary, to be available for spending only for these purposes. This is the practice at UPNG, where a tied allowance of K500 (US$500) per year is granted to staff for books, journals, computer programmes, etc.

It was long assumed that while primary and secondary teachers required training in the art of teaching, post-secondary staff did not. Fortunately this attitude is changing, it being increasingly accepted that anyone who teaches can benefit from professional training. However, in many post-secondary institutions this is not happening. There is value in a basic course as early as possible, and for periodic brief refresher programmes. Having expert visitors from various countries at different times, to introduce a diversity of new perspectives, can also be valuable. This can usually be provided under aid programmes.

We see a good case for staff exchange within the Pacific region. However, given the fact that so much that goes on in the region is determined from the Pacific Rim countries and beyond (and this will be increasingly the case), there is an even stronger case for exchanges with those countries which are the most important partners for each of the Pacific islands nations. Moreover, in many subjects, Pacific expertise is not what is in short supply. Thus if teachers of history or geography are being exchanged between Pacific institutions, they are less likely to carry new information than if such persons are coming from further afield. Likewise, the expertise of the Pacific staff member is likely to be of more interest abroad, where first hand experience is less readily available.

Personal qualities in staff selection

Staff selection anywhere is ultimately subjective. Since formal qualifications and publications provide objective criteria, they sometimes receive undue prominence. We have the impression that one of the differences between the government universities and the private is that the private ones, most of which are church related, place a higher value on personal integrity in staff selection.

Recognising the value of private/NGO/church staff

Staff costs in private, NGO and church educational programmes tend to be lower than those in government and inter-governmental programmes. This reason alone justifies such programmes receiving an equitable share of external aid, and indeed of national taxpayer

funds, along with government institutions. It used to be a widely held view that education in the Pacific was the prerogative of churches; now it is in many cases considered to be the prerogative of government officials. Fortunately it is now becoming accepted in this part of the world as elsewhere that there are many approaches to a good education, and that diversity can be healthy.

Mixing national, regional and international options

The basic question for islands governments, and for individuals, is the extent to which their interests are best served by:

- operating as groups of islands states (and if so which ones for which purposes)
- linking with larger powers (and if so which ones to what extent)
- leaving individuals to choose among national, regional and international institutions, as those do who go to the church-sponsored and other private institutions in the islands, or go privately to universities and colleges in the metropolitan countries.

Regional systems

Four main systems apply in the region. The largest is what might be termed the 'Commonwealth' system, broadly derived from, and still in contact with, the British, Australian or New Zealand systems. Closest to it, and compatible with the least adjustment, is the US system which applies in American Samoa and all islands states and territories above the equator. Third is the French system, which is more difficult to interact with owing to language differences and relative inflexibility. The Indonesian system, within which the western half of the island of New Guinea falls, has only nominal contact with the rest of the region. Moreover, Indonesian standards are generally not high.

The boundaries between the systems are loosening. For example, the Marshall Islands has joined USP and the Federated States of Micronesia is likely to; COPE (Council on Pacific Education) now links Hawaii, Western and American Samoa, Tonga and the Cook

Islands; France has recently indicated a wish to expand the use of facilities in New Caledonia and Tahiti by Commonwealth Pacific states; and some attempts are being made in PNG to expand interaction with Irian Jaya and Indonesia.

Some new overlapping networks are emerging:

1 The most prominent are those based on Hawaii (University of Hawaii, East West Center, Center for Advancement of Pacific Education, Council on Pacific Education, Brigham Young University, University of the Nations).
2 In 1991, The University of Auckland had some 1,233 Pacific Islander students (not including Maori), including more Cook Islanders, Niueans, Samoans, Tongans, and Tokelauans than any other university in the islands or elsewhere in the world. There are Pacific islanders at the other six universities in New Zealand as well. About half of those who identify as Pacific Islanders have come to New Zealand to study, and the other half reside there.
3 The recently formed Melanesian Spearhead Group (a grouping based on the annual meeting of heads of government of Papua New Guinea, Solomon Islands and Vanuatu) has made co-operation in higher education one of its priorities, though how this will be implemented is not yet clear, particularly in view of the tensions between Papua New Guinea and Solomon Islands over Bougainvile. There is likely to be more interaction in education in Polynesia in the 1990s.

The extent to which France will succeed in its attempt to attract students from the Commonwealth Pacific to the two campuses of L'Universite Francaise du Pacifique remains to be seen. The original proposal was countered by anti-independence supporters in French territories who feared the presence of students from independent islands states might exacerbate pro-independence pressures. The main potential influence is that of the Tahiti campus on its nearest neighbours – the Cook Islands, Samoa and Tonga; and that of the New Caledonia campus on Vanuatu.

Much will depend on the amount France spends on the exercise and how far the university adapts its programmes to suit such students.

Categories of institution

There are two main categories of institution. The regional educational institutions are concerned mainly with credit courses, whereas the regional 'development' institutions mainly operate short applied courses. The former are larger, the latter more numerous. As noted above, the only institutions which provide educational programmes for the whole Pacific Islands region are the South Pacific Commission (see page 23), some international agencies and some religious institutions.

Widening the options

The first priority of the islands states has to be to strengthen national development. Most students going abroad prefer to learn in and about the places where the power is, relevant to their needs. The range of such countries is different today from a generation ago, and will be different again next generation.

An important task for national education systems is to compile information on the options available and make it readily available to the public. To the extent that government scholarship funds are involved, we endorse the growing tendency for the selection panel to be widely representative of government, business, NGOs and other interests.

We see advantages in giving students more decision-making power in relation to what they study and where, to the extent that this is feasible. We also advocate requiring them to be more responsible for the results, and to contribute more in terms of money or service. Students who achieve only marginal results are too often allowed to repeat, and many openly discuss the widely used techniques of passing just enough courses to be able to continue, and failing enough to ensure maximum time on scholarship.

Whereas the growing complexity of offerings makes for more

complex decision-making, we believe it also provides exciting opportunities. It helps prepare students and countries for the world of tomorrow, which will be characterised by higher international interaction. Individuals and nations will be better placed the wider the range of countries they have experience in and contacts with, providing that first priority goes to those countries that are likely to matter most to the student and his or her nation.

There is, therefore, a good case for a mix of national, regional and international courses. The first priority is a solid national grounding; the second is highly selective international experience, focusing on those countries that can help the country of the student in future. This necessitates identifying what countries are likely in future to have most influence over a particular country, and then making it possible for an appropriate number of students to study there, in order to understand those countries, their cultures and languages. For all Pacific states this would mean giving higher priority to Japan, China (and Taiwan, Singapore and Hong Kong), Korea and some ASEAN states.

Regional and international linkage is being facilitated by The Commonwealth of Learning (COL). It can facilitate linkages with Australia, New Zealand, Singapore, Malaysia, Hong Kong and Canada, as well as the United Kingdom and other Commonwealth countries which may have something to contribute to the Pacific region. Japan's consideration of an Asia-Pacific satellite for distance education, mainly in English, could be a major influence if it materialises.

COL's work in the South Pacific began in Solomon Islands, its task being to establish a distance education network for technical/vocational courses, and to upgrade rural teachers by linking rural learning centres to the Solomon Islands College of Higher Education and to the University of the South Pacific. Other developments have been undertaken in relation to distance teaching within Papua New Guinea, Samoa, Tonga and Vanuatu. Regionally COL facilitates the teaching of law in USP where courses from Australian and Canadian universities

are used. COL has a potentially valuable role, provided it operates direct to participating countries and institutions and is not constrained by intermediate sub-stations which could complicate the process.

Cultural integrity and international interaction

Pacific countries are trying to evolve national identities which give confidence and legitimacy. There seem to be two strong drives: one for the integrity of the nation (in most cases partly in terms of the integrity of its culture or cultures); and the other for learning in and about those parts of the world with which the country has most interaction, for example, in trade, technological and cultural influences, political and security relations and population flows. The first leads to national solutions, the second mainly to opportunities offered by Pacific Rim countries: in the past this meant mainly Australia, New Zealand and USA, but in the future it will increasingly mean the north Pacific Rim.

There is also an important case for a third level; that of Pacific regional solutions, facilitated by Pacific regional awareness. But if these are over-emphasised they are likely to undermine the first two (national and world), which may be of more long-term value to the nation. Bray's study (1990 pp.267-9) of higher education for small nations emphasises the case for national institutions, even for small states. He quotes Gislason's view that having its own university was a major factor in the creation of Iceland's identity, and that not having a national university has been a contributing factor in the lack of a national culture in Luxembourg. Bray quotes similar views from various other small states. More recently Galtung (1993) is quoted as suggesting that 'small private universities could provide a solution for the crisis in higher education'. He also emphasises the importance of 'high temperature pedagogics', a multi-science approach.

Pacific Islanders, particularly in Polynesia and Micronesia, are among the world's most mobile people: for example, not including tourists or other non-citizens, a number equivalent to nearly half

the population of Rarotonga travels internationally each year. Tourism is the largest industry for several countries and seems likely to become so for more. International finance centres play a bigger role here than in any other region. Relative to population size, Pacific governments have more diplomats and other staff travelling abroad than any other region. These and other factors mean than Pacific leaders (and those at lower levels) need to be familiar with other countries. The countries with which they need most familiarity are the industrialised nations of the Pacific Rim.

Obtaining part of their education in those countries is not only of value, it is the first priority of most Pacific people. It tends to be others who wish to restrict their access.

The aim should be to broaden the mix. The idea of taking all one's courses for a qualification in one place is going out of date. The cheapest way to achieve an international perspective is by national institutions taking some courses by distance methods from USP, UPNG and other institutions – the wider the range the better. The next level is student exchanges, for which there is more scope than has been exploited. Except for the small number of private students going abroad (almost all of whom want to go to metropolitan countries), the decision as to where to send students for full-time studies for most islands countries is determined by aid donors. Current donor preference is for most to go to institutions in the region, with a proportion going to the country of the donor. These are mainly for subjects not taught in the region, or for post-graduate studies, or for outstanding students such as are provided for under the Australian Equity and Merit (now Sir John Crawford) Scholarships.

Self-reliance versus internationalism

There are strong political and psychological forces encouraging self-reliance and others facilitating dependence and interaction with a wider range of countries. There is much public rhetoric to the effect that the former is good and the latter bad. In terms of action, however, that which is rhetorically recommended is not always implemented.

What action falls within which category is not always self-evident, and is sometimes reclassified according to the need of the speaker. Self-reliance may cost more in some circumstances, and it gives a narrower range of personnel to choose from. However, if funds are used to import better staff or teaching aids from abroad, this can be classified in either category.

Isolation is not a goal of any Pacific Islands country. They want self-reliance, but in a highly interdependent world – particularly for very small states – this can only be achieved by a good knowledge of the external sources of power. Thus, all want extensive contact with the world community and espouse a general principle of internationalism. None, however, wants unrestricted contact and all governments require some degree of filtering or control, particularly in relation to curriculum materials and staffing.

Most countries want to undertake at least some teacher training nationally, but there is a very good case for specialised forms of education being taught on a regional basis, for example, physical education, non-formal education, expressive arts and teaching of the disabled. There is also a very good case for ocean resource management, land management, journalism, linguistics, archaeology, geology, librarianship, tropical agriculture, tropical fisheries, town planning, surveying, population studies, community development, law and many other fields to be taught in regional centres – but not all at one centre (a point reinforced by the 1991 Review of USP under Professor Unku Aziz). The developing Caribbean notion of regional 'centres of specialisation' (to overcome the problems created there by excessive centralisation) merits further consideration in the Pacific.

What is needed is a new concept of regional co-operation, with more of the facilities and benefits distributed, and more co-operation between nationally-based institutions. However, as most student movement in the region is funded from abroad and is tied to institutions and criteria decided by those who donate scholarships and capital funds, it is necessary to persuade these donors of the need to spread the growth in various countries. Otherwise the benefits accrue where the concrete is poured.

Most islands countries will be marginalised if they become pressured into a single Pacific islands regional system, and can only approach the world beyond through that system. Their leverage is their sovereignty, their ability to negotiate freely. And in a complex situation, flexibility, multiplicity, and freedom of choice are essential ingredients if the islands states are to avoid being locked into the kind of bureaucratic straitjacket from which Eastern Europe is trying to escape. Linking arrangements between islands institutions and those abroad (both in other islands states and beyond) are essential. They can bring in resources, skills, comparative experience. But the best results will be derived from each country making multiple linkages, both to obtain the best resources from wherever they are available, and to avoid any external source having excessive influence over them.

Equity issues

Geographical access

Within islands countries geographical access is a major issue, as there is little provision for students outside the capital city. Much more than in the industrialised nations post-secondary education is skewed in favour of capital cities. For example, in the Cook Islands 57 per cent of the population lives within 20 minutes driving time of the USP Centre, and almost all Cook Islanders own motor vehicles: 81 per cent of the credit course enrolments in 1991 are in the capital. In Solomon Islands only 10 per cent of people live within even 30 minutes drive of the USP Centre and very few have their own vehicles: 76 per cent of USP extension students are in the capital. In both cases, failure rates of students outside the capital are very high, owing to minimal support services.

The disproportion in-country is sometimes less than it appears. For example, many students on Rarotonga are outer islands people who live on Rarotonga – some having come in for that purpose. The very fact of being the capital means that Rarotonga contains a higher proportion of people with the prerequisites for post-secondary studies. Since, however, there is free mobility and full employment in

Rarotonga the constraints are not so serious. One example of this is that even though 57 per cent of the population lives on Rarotonga, only 7 of the 21 permanent secretaries and heads of statutory authorities are Rarotongan, and 14 are from other islands within the nation.

The situation in Solomon Islands is more serious, both because only one tenth of the population lives in the capital and because it is very difficult to obtain work. This concentration of educational privileges in the capital is noticeable in almost all islands nations.

The issue of geographical access is even more noticeable in regional institutions, in which the host country is the main beneficiary. For example, though Fiji has only 45 per cent of the population of the USP region, its people have received about 71 per cent of students and of regional staff posts, 85 per cent of staff training awards, 91 per cent of postgraduate students (now the normal route to staff posts) and 96 per cent of the books (and 99.6 per cent of the inter-library loans). This is despite the fact that foreign donors have supplied almost all USP's capital funds, staff training and research, a high proportion of its scholarships, many of its staff salaries, as well as substantial contributions to the running budget, ostensibly for equitable benefit of all member countries (Crocombe and Meleisea, 1988 pp.346-63). To take another example, in its 25 years to 1993, USP graduated one out of 125 of Fiji's population, but only one out of 1,200 of Vanuatu's. In other words, from every donation of buildings, staff and every other input by donors, about 90 per cent of Vanuatu's intended share has been taken by Fiji. Vanuatu has been marginalised with the remaining 10 per cent. This is the opposite of the aid principle of giving most to those with most need. The high-level New Zealand foreign affairs review, after consulting all member countries, noted the 'perception in the region that USP is more a Fiji than a regional institution' (Henderson et al, 1990 p.147); and Albert Wendt, probably the most internationally distinguished Pacific islander academic and a former Pro Vice-Chancellor of USP, felt that 'Our governments and donor governments should ask themselves if they are still willing to finance an institution which, I believe, is Fiji's national university'

(Wendt, 1989 p.94).

A much more equitable spread of benefits and opportunities could be achieved if priority were given to that goal. However, the other countries have now been so deprived over the last twenty years that equity would require extensive corrective action over many years. It is probably unattainable in the short term with such a high degree of centralisation of facilities, and consequently of staff, economic and other benefits.

The same problem arose in Micronesia from the same cause, external planners and funding sources placing too much emphasis on centralised regionalism in situations of restricted mobility. Although the Community College of Micronesia is technically a joint facility of the Federated States of Micronesia (FSM), the Marshall Islands and Palau, the main campus is in FSM. At the 1991 graduation 63 of the 76 graduates were from FSM, only 13 from the other two states combined.

The benefits from South Pacific Applied Geoscience Commission's extensive programme of education and training are likewise spread unevenly among member countries, even though its finances are donated from outside the region for equitable assistance to members. Fiji, with 14 per cent of the population of SOPAC's member countries (excluding Australia and New Zealand, which do not benefit from the training programme), was much the largest beneficiary on this, including the most valuable training of all – employment in the organisation, whose regional staff, including the Director, have all been mainly Fijian.

Although perfection is not to be expected, experience has shown that centralisation benefits the centre at the expense of the others. Other approaches are needed. One is to spread facilities. Thus USP's School of Agriculture is located in Samoa (and the proportion of Samoan students there is high), Pacific Languages Unit is in Vanuatu (and the proportion of Vanuatu students is high there). The Institute of Marine Resources is to be located in Solomon Islands, the country with the highest proportion of its national income derived from marine resources, the highest proportion of its work force living from marine resource industries, and the most

diverse marine environment. The principle is appropriate, but this kind of devolution cannot be achieved unless the decision-making power is devolved with the facilities. Then co-operation on a basis of equality and mutual respect is possible.

The same problem arises with some commercial firms. The Australian headquarters of both Westpac and ANZ banks decided to centralise training for the Pacific on Fiji. Apart from a temporary Australian manager, the staff of the training centres are all Fiji citizens, who receive the higher levels of training, employment and salary.

Access for the disadvantaged

Countries have experienced a varying degree of success on this issue. Kiribati, with a strong tradition of equity in its society and polity, allocates access on the basis of a quota for each island. Otherwise, students living in Tarawa, the island where the capital is located, would gain almost all places in secondary and post-secondary institutions, for Tarawa has generally better schools, more highly educated teachers, and a range of additional stimuli. Moreover, the students or their parents or relatives living on Tarawa are in a much stronger position to apply leverage to those who control access to such institutions and to scholarships for training abroad. This kind of allocation, at least partly on the basis of geographical location, appears to us to merit further consideration in other countries.

Where some ethnic communities are more advantaged educationally than others there is also a case for transitional priority being given to the disadvantaged. This is done in Fiji for indigenous Fijians and in Nauru for Nauruans, and for indigenous people in several other countries.

Access for women

Women are at a serious disadvantage in all Melanesian countries, and in parts of Polynesia and Micronesia. That the situation varies widely is illustrated by the fact that of the USP Extension Services credit course enrolments in the first semester 1991, 62 per cent of

the enrolments in the Cook Islands were women, but only 17 per cent of those in Solomon Islands were. Most other forms of post-secondary education also show a preponderance of women in the Cook Islands (except in apprenticeships, aviation, theology and a few others) and of men in Solomon Islands. The trend in the Cook Islands is reinforced by the fact that the proportion of women under 30 is higher than those over 30.

In neighbouring French and American territories, women outnumber men at L'Universite Francaise du Pacifique in Tahiti, the University of Guam (57 per cent) and the University of Hawaii (56 per cent).

In contrast, in Papua New Guinea, Solomon Islands and Vanuatu, fewer girls receive secondary schooling than boys, fewer girls can obtain employment, and cultural constraints on allowing girls the mobility necessary to attend tertiary education are stricter.

The predominance of women in higher education in eastern Polynesia and western Micronesia is recent. As in French Polynesia and Guam, high levels of per capita income and education correllate with high levels of female participation. The achievement of equality by women is easy to explain, but the rapid movement to much more than half is not. To some extent it is catching up, since in earlier years boys had more opportunities. But this cannot be the total explanation, for that factor also leaves more men equipped to take tertiary courses. Moreover, in age cohorts where both sexes have had the same opportunities, women are well ahead. For example, in the foundation (preparation for degree studies) programme taught at Tereora College in the Cook Islands in 1991, there were 19 girls but only five boys. Achievement levels in the nation's high schools indicate that the tendency for female students to outstrip males is increasing.

In the Cook Islands there is relatively full employment. In the public service 51 per cent are women, but there and in the private sector the proportion of males increases with the rank of the post. The difference in current enrolments cannot be explained by cultural factors; they would indicate the opposite, as formal education

both in traditional society (for example, for ta'unga or experts in various fields) and in the colonial era, was primarily for males. The reasons may have to be sought in deeper psychological factors, one manifestation of which is the much heavier involvement of men with alcohol and other stimulants, and with contact sports (boxing, rugby, etc).

Papua New Guinea's National Development Strategy, a document of basic principles adopted after independence in 1975, recognised women as disadvantaged, and called for the rapid achievement of equality. In practice, however, fewer women were employed in 1980 than in 1971, as PNG men generally took the jobs of departing expatriate women, and also displaced PNG women (National Public Expenditure Plan 1983-1986, p.58).

Enrolment of trainees in teachers' colleges for community (lower level) schools, was 60 per cent male, 40 per cent female; academic staff was 70 per cent male to 30 per cent female, with not much change over the previous seven years (Kara et al, 1988 pp.69-70). Women are particularly under-represented in the sciences and technology, with an average of only 12 per cent of female entrants to science at the University of Papua New Guinea between 1979 and 1987, even though the female students averaged higher grades (Wilson, 1988 pp.117-20) and only 6 per cent of female students at the PNG University of Technology between 1970 and 1984, even though women achieved just as well as men in tertiary science and mathematics courses (Wormald and Crossley, 1988 p.9). There was a higher proportion of women at secretarial, technical and community colleges, but in the more than 60 institutions of higher education, 78 per cent of enrolments were male (Commission for Higher Education, 1990 p.37).

Pressure for equality of women in higher education comes from foreign aid donors (many of whom make equal participation of the sexes a condition of scholarships) rather than from local pressure groups. But the most effective pressure comes from full employment (which gives women more opportunities), higher incomes (which facilitate labour-saving devices and mobility), and rising aspirations.

All or almost all Pacific countries have a policy of equality for women, though practice varies. Therefore, positive discrimination in favour of women students for scholarships, access and other incentives is practised to a varying extent. In situations of major imbalance we see a case for even more preferential treatment, but also note that there are limits to the extent to which this can be forced by educators. For instance, in Papua New Guinea, one of the constraints on women's participation is the law and order problem. There may also soon be policies needed in those countries where women have the advantage, to give equitable opportunities to men.

Finance

Many countries of the region experienced stagnant or declining per capita real income during the 1980s, due in part to deterioration of world prices for primary produce, and in the case of Fiji and PNG to internal political problems. The proportion of government revenue devoted to education declined even more in most countries of the region, due to higher spending on military, police, marine surveillance and related 'security' services, as well as on infrastructure for telecommunications, tourism, manufacturing and marine resource exploitation.

Yet the tendency over recent decades has been for governments to pay more of the costs of post-secondary education, for three main reasons:

1 The local and overseas funds to churches, which had been the main suppliers of higher education, declined.
2 Foreign aid has been much more available to government institutions than to private ones.
3 Both independent and colonial governments have given priority to post-secondary education in order to staff the growing public services, and to meet public demand.

Whereas it used to be the case that education required financial and physical contributions from students, their families and com-

munities, it is now mainly provided free by someone beyond their knowledge. Mr Aukino Tairea, Secretary for Foreign Affairs of the Cook Islands, says that when he receives requests from schools for foreign aid funds to buy lawn mowers (as he does) he remembers that when he went to school they brought broken bottle glass or old razor blades with which to cut the grass.

Recently, however, both national governments and foreign donors have been reducing the proportion of funds available for education. Post-secondary studies have absorbed a very high proportion of the education budget: for example, Siwatibau (1990 p.27) notes that in Papua New Guinea 50 times more is spent on each tertiary student than on each primary one, and 18 times more than on each secondary student (compared to the international average for low income countries of 25 and 13).

The difference in costs in different institutions providing similar programmes is striking. The main difference is between institutions which are primarily government funded, whether regional or national, and those that are privately funded. For example, for the government to train a nurse in PNG costs 50 per cent more than it costs the churches (Commission on Higher Education, 1990 p.38). In many cases throughout the Pacific the discrepancy is greater.

Cost does not necessarily correlate with quality. The limited evidence available would seem to suggest that the cheaper training is no less effective. A study of university development in PNG from 1961 to 1976 observed that the number of diploma and degree level candidates from the then three main church-sponsored institutions 'was small by comparison with the output of the two official universities ...[yet they were] probably among the best graduates the country has produced' (Howie-Willis, 1980 pp.249-50). Their influence reached far beyond the churches, to education, media and politics. In 1991, one of the most outstanding leaders of PNG (not himself a church man or a product of church education) said he did not expect the future leadership of PNG to come through its national universities (in their present state at least), but from education in the private institutions or overseas.

Fees

Very few students in government-sponsored institutions pay fees. Most are paid by donor governments, national governments or other sponsors. The revenue from fees depends not only on family incomes but on what the community accepts as reasonable. Thus parents in Tonga and Kiribati pay a relatively high proportion of their income for school fees, even though both countries have very low per capita incomes. In Papua New Guinea and the Cook Islands, on the other hand, even though the capacity to contribute to education is much higher, parents have not been accustomed to pay much. Any government which tried to change that situation would be concerned about loss of public support. Nevertheless, the demand for higher education is so strong that the public probably would contribute more to their own and their children's education once the pattern became established.

One advantage of being responsible for at least part of one's fees and other costs, is that students and their families are likely to take more interest in the study process, devote more time to it, and ensure that value is derived from it. The Tonga Ministry of Education's university foundation studies programme puts this into effect by requiring parents (or students) to make a small financial contribution. The Minister believes this has a beneficial effect on student motivation and family support, as well as on the maturation of the students. In contrast, in the early years of the National University of Samoa students paid no fees and they were paid an allowance. Students graduating from its foundation (pre-degree) year were less successful than those in Tonga, despite the much higher cost. While this was not the only factor, the fully funded approach seems less cost-effective, less academically successful, and less maturing for the student.

With few exceptions, full-time students at UPNG, UNITECH and USP make no contribution in time or money to their education, and we believe students tend to be less mature and responsible for that reason. At University of Hawaii, by contrast, nearly half of the students are part-timers with full-time jobs, and many of the

rest are full-time students with part-time jobs. At the private universities in Hawaii the student's contribution to his or her own costs seems to be even higher. Many students at Japanese universities likewise work part-time to help pay for their education, and one of the most common jobs for university students is to tutor high school students. The teaching, in addition to the money it generates and maturity it develops, also assists the education of the person doing the teaching.

A theoretical disadvantage is that fees can facilitate social stratification and discriminate against those most in need. But in practice the opposite is the case. Pacific Adventist College (PAC), The Brigham Young University (BYU), Divine Word Institute (DWI), University of the Nations (UON) and Atenisi Institute and University do not cater for the wealthy and privileged whereas the government-sponsored institutions contain a high proportion from the privileged sectors.

Divine Word Institute

Private institutions have evolved techniques whereby, irrespective of income levels, students can earn their fees. Degree study at DWI costs K2,800 (about US$2,800) per year, including accommodation and food. Of that Natschol (from government) and the DWI Scholarship Fund (private) contribute K1,800 and the student contributes K1,000, plus a minimum of four hours of community service per week. The student's contribution is part of DWI's 'philosophy of self-reliance through the payment of school fees and willing participation in community service' (A Guide to the Divine Word Institute, 1991 p.39). Students also care for their own living quarters, share dining hall duties and take part in campus maintenance. 'Emphasis is placed on the value of work, self-reliance, responsibility to community and the acquisition of critical thinking' (ibid., 1991 p.4). Students may borrow from a revolving students' loan fund, to be repaid within three years of graduation. All students must have worked for one year before beginning tertiary studies, but most have worked for two. Students make their own applications for private work during vacations for at least

nine weeks per year. DWI assists with tutoring in letter writing and other approaches to locating work, and considers that both the employment and the confidence to find it are valuable parts of the education process. In a nation with major problems of unemployment, it says something for the reputation of DWI that all their students have found jobs every year for the last ten years. Many have become permanent staff of their vacation employers.

THE BRIGHAM YOUNG UNIVERSITY

This Mormon-sponsored institution in Hawaii is attended by about 300 Tongans, Samoans, Cook Islanders and other South Pacific people, out of a total of 2,000 students. Fees were a problem which could not be resolved until President Howard Stone established the very successful Polynesian Cultural Center as a commercial enterprise at which students could work part-time (20 hours per week during semester, 40 hours during vacations) to pay their way through university studies. The work gives them training and confidence as well as funds.

PACIFIC ADVENTIST COLLEGE

One feature which keeps costs low at PAC is that students contribute to the operation of the campus, so that few ancillary staff are needed. For example, only one permanent worker is employed in food service since the rest of the labour is provided by students. Students also undertake most routine library work (compulsory for students training to teach), food production, security and janitorial services, maintenance, the business office and store. Single students must work 14 hours per week, married students seven hours. The sale of farm produce further reduces costs. Like all Pacific universities, there is external subsidy, in this case from the Seventh-Day Adventist church in Australia.

Students who cannot meet the fees (K1,056 or about US$1,100 per year for single students, including accommodation and food) can earn them by full-time work during vacations. About one third of PAC students pay their way entirely from work.

The work component is not just to save money. Even a student of wealthy parents is required to work as this is seen as an essential part of the education process, balancing study with practical activity, leading to greater self-reliance and responsibility. Students gain confidence and maturity by paying for their own education. We expect the work/study component is also a factor in the reputation PAC students have earned for responsibility and productivity.

Despite low costs, the ratio of staff to students is high (about one to nine), and the demand for graduates is high, a prima facie indication of the quality of education, despite unemployment among graduates of other institutions.

THE UNIVERSITY OF NATIONS

This is a recently established church-sponsored university in Hawaii which a number of Pacific students attend. It recently acquired land to build a campus in Tonga. Fees, which are much lower than the costs of the state university, are kept low by a requirement for ten hours of campus work per week and by a 'live-learn' philosophy of education whereby many of the students and staff of a particular faculty live together in one 'village' to facilitate staff-student interaction. Degrees are offered in education, science and technology, performing arts, communication, counselling and health care, and Christian ministry. Humanities and international studies are being developed. It is the most recently established university being used by Pacific people, and we have no data on the quality of its qualifications.

ATENISI UNIVERSITY

This institution charges P540 (about US$400) per year for full-time, non-residential, degree studies, or P60 per course for part-time students. Students have provided most of the labour for the construction of the university buildings. Despite the low costs and minimal facilities, an independent study observed that 'the success rate of Atenisi students in New Zealand universities has been remarkable' (Coxon, 1988 p.194).

STUDENTS FROM COOK ISLANDS, NIUE AND TOKELAU

Students from these countries have effective dual citizenship with New Zealand. Since fees for citizens there are very low, that is the cheapest option and the one that offers the most freedom, for example, for students, spouses and families to enter and work. This means that the only students from these countries who study in islands institutions (except for PAC) are those for whom external scholarships are only tenable there. Many Samoans also have dual citizenship with New Zealand and use that option.

The obvious ideal is for students to make some contribution to fees, but with exemptions for the poor if opportunities to earn one's contribution are not available. Even if such an ideal were attainable (and it is more achievable than is usually realised), fee levels are determined by the availability of other funds (from governments, churches or aid) rather than by ideals. For a discussion of loans and bonds see page 141.

The need to reduce costs

The financial constraints highlight the need to deliver post-secondary education at lower cost. Possibilities include a higher proportion of teaching by distance methods (which do not require the same capital outlay, fares or accommodation costs, and reach a wider clientele), more effective use of radio and satellite, lower cost texts, summer schools, more use of private institutions, and drawing more on larger systems beyond the islands.

The prospects of more external funding for post-secondary education are not good from Commonwealth sources. Per capita contributions to education in the region from the United Kingdom, Australia and New Zealand declined in real terms in the 1980s. Those from Canada increased, but Canada is not a major contributor. Projections for the 1990s suggest a continuing decline from these sources, but an increase from north-east Asia, particularly Japan in the short term and other East Asian countries with interests in the region in the longer term.

Internal sources of funding, including greater contributions from students and parents, may be necessary to achieve quality and

economic growth. This could have positive effects, as is demonstrated by those countries of the Pacific Basin which have made the most rapid strides in higher education and economic growth and which are also those in which parents and students make a considerable contribution to higher education. We note the spread of scholarship trusts (commercial insurance/savings schemes for higher education) in Pacific Rim countries. There is a limited role for them in the islands.

Links between costs and student responsibility

Our favourable impression of the institutions where students pay for at least part of their education and take responsibility for their facilities has been noted above. The contrast with other institutions is obvious. An official of UPNG spoke to *The Times* of Papua New Guinea on 3 January 1991 on the 'astronomical sum' required every year to repair vandalism caused by students – doors knocked down, windows smashed, fly wires torn open, dormitories 'littered with rubbish, betel-nut spit and human excreta'. The damage was 'not something new. This has been going on every year'. The PNG University of Technology has similar problems. Apart from large-scale fights, occasional killings and pack rapes by and of students, it has been at times necessary to declare a state of emergency. In May 1991, in riots on the two campuses, 16 cars were hijacked and destroyed along with other damage. Even more serious than the repair of material damage is the fact that graduates move onto the labour market and into positions of power, when they have not learned responsibility.

Yet the Divine Word Institute and the Pacific Adventist College, catering for students from the same backgrounds, do not have these problems. One of their advantages is being smaller in scale, but we believe also that the requirement for students to contribute to the maintenance of their facilities, and to the costs of tuition, is a significant factor. Thus in institutions where students carry a significant level of responsibility for their costs and their physical environment, the costs are much lower, the condition of the campuses much better relative to cost, and the graduates seem to be more mature.

Incidentally, the graduates may also be fitter, as a result of their participation in physical work.

In 1990, the PNG Commission for Higher Education decided, partly to overcome the problems discussed here, that whereas previously their institutions had two functions (teaching and research), henceforth they would have a third – community service. The type of community service is for each institution to determine.

Responsibility and productivity

Of the many factors which may relate to the low and relatively stagnant real incomes per capita in the region, one is the pattern of formation of the region's most talented young people and the assumption that qualifications are the key and that other experiences are peripheral.

Most students in national, regional and international government-sponsored institutions have been put through an educational process in which all fares, fees and other costs have been paid, with no contribution from the student required. Thus, those with the highest potential are kept for years in a state of dependence, with little opportunity to develop responsibility, productive initiative, or the ability to solve real problems.

An apparent tendency which merits detailed research, is that a higher proportion of students who have integrated work with study and contributed to costs, have subsequently made a more productive contribution to their countries. Many were educated in small-scale, highly integrated, clearly focused, private institutions.

Official planning in the region still seems to be largely in the opposite direction. In some cases, outstanding success has been achieved by those who have been educated in large systems, but due to their own efforts (usually by concurrent work and/or vacation work) rather than with total sponsorship. The five private systems referred to above all demonstrate that it is possible to achieve the goals of greater personal reponsibility, integrated learning, student contribution to costs, and low total cost. More aid funds channelled to private institutions which work on these lines might yield better long term results at lower cost.

Futa Helu pointed out to us that integrated work and study 'harmonises with the basic rythm of Pacific life and is to that extent a healthy approach'. We do not accept the view put forward by some people that integrating work with study reduces the quality of education. If there is an impact, we expect it to be positive, provided the mix is not excessive: the National University of Samoa provides full-time degree courses to nominally full-time teachers (who are in practice given some time off for study) – this seems to be expecting too much. It is understood that the system is being reconsidered.

Loans and bonds

The Government of Fiji recently introduced a partial loan scheme but it is too early to know how effectively it will work. Loan schemes reduce the long-term cost of higher education to the public, and facilitate more higher education. One disadvantage is the high administrative costs of loans and the difficulty of tracking defaulters. However, a very recent change in many Pacific countries is that private banks are giving loans to individuals for higher education, usually at concessionary rates of interest.

The effect of loans on student motivation may be conflicting: on the one hand they may discourage some people from studying; on the other, they probably are an incentive to study harder and to learn more responsibility.

Bonds have been used by Pacific governments for scholarships abroad, but most such schemes have been abandoned as too difficult to implement. When the bond is signed the student is usually legally a minor, but on reaching 21 years of age, he or she is no longer legally bound by it. Likewise, parents who sign the bond cannot be held responsible after their child reaches 21. Woodhall's practical guide to the use of loan finance for students is useful here (1988).

External aid

The Pacific Islands states receive more aid per capita than any other part of the world. That which is allocated to education is almost all to post-secondary. The volume of aid varies according to relations

with donor countries. The purposes for which it is available vary according to donor priorities:

1 The largest determinant is political interest. Thus, the highest funding per capita for education is in the French territories, the next highest is in the US territories and associated states, the next is in countries and territories associated with New Zealand, then those linked to Australia, then those associated with Britain, and least in the Indonesian province of Irian Jaya.
2 While the first priority of donor nations is to help nations with which they have special relationships, the second is to support regional organisations. The first priority of most international agencies is to organisations like their own, that is, multi-country institutions. It is also administratively easier to deal with one recipient than with many.
3 As a result of 1 and 2, the greater the need, the less the chance of meeting it from aid, as donors have other priorities and agendas.

Of Australia's aid to the Pacific in 1985-6, some A$20.4 million (29 per cent of total aid) was spent on education. Only 14 per cent of aid to education went to the primary and secondary sectors, and 78 per cent to post-secondary (14 per cent vocational and technical, 64 per cent university) and very little to teacher training (Throsby and Maglen, 1988 p.vii).

Despite constraints on the amount of aid, post-secondary education is likely to remain a priority. The vital question is, what is the best distribution of aid to education? Our impression is that quality is more important than quantity; that upgrading the teaching staff from pre-school to tertiary is a high priority; and that greater overall benefit will be derived by distributing more of the aid to individual nations, so that they can determine the mix of national, regional and international education that best suits their needs.

We used to think that the way to upgrade the quality of education was to get teachers to take higher qualifications. But recent

studies in Tonga show that standards of both primary and secondary education dropped during the past decade despite a great improvement in the formal qualifications of teachers. We can no longer simply assume that improving formal qualifications of teachers brings about a higher quality of education.

Returns on buildings, equipment, books and time

'Lavish buildings and equipment will not raise quality' (Throsby and Gannicott, 1990 pp.10-11). Those authors do, however, regard quality books and other instructional materials as one of the most cost-effective ways of raising the quality of education.

There is a tendency, particularly where foreign aid is involved, for recipients to request more lavish structures and equipment than they would consider necessary if spending their own funds, and for donor nations to seek publicity in perpetuity through structures bearing their brass plaques. This generates competition between donors to provide unnecessarily lavish buildings, and in the most visible locations. One of the most successful structures in higher education in the South Pacific is the central complex of the University of Papua New Guinea campus which Sir John Gunther insisted be of maximum simplicity and adaptability, with minimal maintenance over a long life. It also achieved character as well as pragmatism at modest cost. What Atenisi has achieved with a tiny fraction of the capital outlay per student cautions against the lavishing facilities on a privileged few.

The time for which buildings are used is also very low, and here again it appears (though we do not have concrete data) that this applies more in government institutions than in private. The National University of Samoa is exceptional, with its limited facilities being fully used in morning, afternoon and evening sessions. USP is probably more successful than most in using some buildings for courses, conferences and other activities during non-teaching periods, but the scope for fuller utilisation is considerable.

The amount of time allocated to learning, with the minimum of interruptions correlates with better performance. Universities anywhere have an amazing talent for creating additional holidays or

breaks. For some years UPNG planners found it necessary to allow for about two weeks of student strikes per semester (the first semester of 1991 saw about three weeks of strike time).

Post-secondary courses are usually planned in terms of a certain number of contact hours, but in our experience most courses are completed with many less hours of contact due to staff absences, unscheduled holidays, diversions or 'time off'. It is suggested that administrators re-examine the question of contact hours, determine what is considered essential, and ensure that the time is allocated or the course extended. Students are in many cases short-changed in their education – and most connive readily in the short-changing!

The 28 to 32 weeks of teaching undertaken in most post-secondary institutions in the Pacific are an anachronism carried over from Europe in the days when students were needed to harvest the crops in summer. This is another of the assumptions underlying post-secondary education in the region which is overdue for reconsideration. The countries of East Asia, which will be the main points of interaction for Pacific Islands states in the coming generation, spend more hours per day, and more days per year, on the learning process. Unless that gap alone is reduced, the Pacific Islands states will fall further behind those Asian neighbours who are going to have great influence over their region.

Post-secondary education and economic development

There has been a world-wide trend to produce too many graduates in the social sciences and humanities. Conversely, there is a shortage of graduates in the sciences, technology, mathematics and commercial studies. Higher priority needs to be given to education and training for productive roles. However, it seems to us that the structure and philosophy of many of the educational institutions are not at present well suited to doing this. The private institutions are much better suited to it. Policy-makers may wish to explore the possibility of giving more freedom to students to use their scholarships in public or private institutions, and to restructure state-run institutions on more privatised lines.

A related assumption,underlying the practices of most countries of the Pacific in the late colonial and early independence periods, was that economic growth came from central planning and a massive public service. Education and training were thus oriented mainly to those goals. Despite some modification, this it still the dominant orientation of most post-secondary institutions – particularly the higher level ones – in the region today.

In the early stages of independence it was assumed that the then pattern of post-secondary education would be a major contributor to economic growth. That assumption seems not to have been borne out: Giri (1990) notes that in Africa a 25 times growth of higher education between 1960 and the late 1980s has 'borne little fruit' as 'the essential basis was unsatisfactory and ... has failed to generate the anticipated economic improvement ... Not only has the education system failed to lead African societies to economic growth. It is also increasingly divorced from social needs ...'

Likewise, all the significant economic successes in the Pacific islands region make minimal use of the region's universities or their products, for example: mineral exploitation (the main growth point in Papua New Guinea); the growth of the foreign tourist trade in a number of countries; industrial investment in Fiji and Tonga; coffee in Papua New Guinea; vanilla in Tonga; cultured pearls in the Cook Islands; and forest industries in Fiji. The international finance centres (the second largest industry for the Cook Islands and a significant one for several other countries), could use the products of the formal education available in the region, particularly those qualified in law and accounting – but do not. Although many islanders have these qualifications, few are involved in the industry, probably because a crucial ingredient is initiative and entrepreneurship, for which the training experiences provided to most islanders (whether in the islands or beyond) have been counter-productive.

There is much more to education than generating national income levels, but we are not convinced that the principles adopted by the present government-sponsored institutions meet the intellectual, skill-training or personal development goals any better than the alternatives.

Preparing for the Twenty-First Century

To conclude this study, it is appropriate to make a number of recommendations concerning the future development of post-secondary education in the Pacific. We have framed these recommendations under 11 headings.

1 Extending choice

Educational planning needs to facilitate open access to a wider range of learning sources. None of us knows how far world trends will impact on the Pacific. However, the views of seventeen of the world's most prominent thinkers on the future are worth considering (as summarised by Coates and Jarratt, 1990). Many feel that formal systems of education face long-term decline. Roy Amara, past president of the Institute for the Future, considers that 'educational institutions will not be major players in the future'. Alexander King, President of the Club of Rome, says 'universities have poor potential for change', and Richard Lamm that 'as the education system declines, computers and related technologies will replace teachers'. Dennis Meadows notes that 'already, more education is being done by businesses than by colleges', and Robert Theobald, that 'community colleges are more useful models than four-year universities'.

As has been seen, these trends are already apparent in the Pacific. Ensuring that students have access to an ever widening range of

sources of learning will necessitate allocating some government and aid resources to stimulating the provision and marketing of educational materials and programmes, by the private sector, by church systems and by government.

Tremendous progress has been made in post-secondary education in the Pacific region since World War II. But the pace of change is accelerating, and even greater challenges lie ahead. Expansion and reorientation of efforts is needed to make education more cost-effective, more extensive, and better adapted to the needs of the new century.

The current somewhat monopolistic approach to education needs to evolve into a more open one in which the public has a wider range of choice, and in which those who want to provide innovative forms of education may do so. Ministries of education can play a vital role in facilitating and stimulating educational development, including encouraging government departments, private businesses, churches and voluntary organisations to expand the educational component of their activities, both for their own employees and for the community they work in.

2 Increasing levels of self-financing

A major error of past thinking was to assume that if money were put into teaching information and skills and acquiring qualifications, the nations of the South Pacific would 'develop'. A lot of teaching was done and qualifications issued, but the economic stagnation of the 1980s shows that this was too simple an assumption. Moreover, governments do not have enough money to supply nearly as much education as their people want.

The evidence seems clear to us that integrated work/study programmes, whether organised by firms, churches, self-funded by students in private universities, or involving part-time, mainly distance, education, are more cost-effective than the regular government funded programmes. Also, the total experience in these work/study schemes appears to engender more maturity, responsibility and self-reliance. Thus, taxpayers' funds (whether from the nation or metropolitan country) would seem to be better spent on

encouraging the further development of these programmes than on expanding the free government-sponsored sector.

It should also be possible, within the government sector, to shift towards a higher proportion of students being involved in work/study schemes, probably through more part-time distance programmes and summer schools.

The assumption that large systems are more cost-effective has been shown to be fallacious as some of the best education is coming from some small, low-cost systems.

3 Coming to terms with new international context

The major political pressures in the structuring of post-secondary education in the region still come from donor nations. In the past these were mainly former colonial powers and international agencies, but in the future these are likely to be the rising powers of East Asia, particularly Japan and its neighbours. This shift has major consequences for higher education.

The changing power balance necessitates teaching the history, polity, culture, economies and main languages of East Asia. The facts can be learned anywhere, but it is increasingly important that a proportion of students study in those countries. Over the past two generations total immersion in the cultures of USA, Britain, Australia or New Zealand, gave leaders an unparallelled experience which was of immense value when they had to deal with those countries later in their lives. Now that the countries that matter are changing, the broadening range of countries in which Pacific people study is encouraging, but the numbers who study in Japan, China and their neighbours merit urgent expansion.

4 Strengthening national institutions; widening the spread of regional facilities

National institutions and education systems should be strengthened and regional facilities more equitably spread. Regional co-operation has an important role in higher education, but it is overconcentrated and thus disproportinately benefits the countries which host the institutions concerned, and those beyond the region who

provide resources for higher education, to the detriment of most Pacific island countries. (The same problem was apparent in USSR and Eastern Europe when it was overcentralised.) The ideology of centralist regionalism, in a region where mobility is limited by legal, administrative and financial constraints (none of which has relaxed significantly in the past 25 years while some have been tightened), leads to the massive relative deprivation of the people of those countries which are locked into the region but have no significant alternative sources of higher education.

To the extent that regional solutions are found, and there is an important role for them, it is important that physical facilities, as well as economic, employment and other benefits be more equitably spread. Regional facilities need to be distributed rather than centralised, to avoid the main beneficiary of regional educational services always being the host country; a spread of physical facilities distributes leverage as well as educational opportunities and reduces the capacity of a single institution to serve any one nation disproportionately. Nevertheless, there is much scope for regional interaction and sharing between national institutions. The developing Caribbean notion of regional centres of excellence, to overcome the problems of excessive centralisation, merits further consideration here.

It is important that each nation be able to choose the best mix of options for its students, whether these are national, regional or international.

5 Internationalising education

While there is a case for strengthening national education, there is also a case for international experience – including that in other Pacific countries as well as further afield. If possible, students should avoid doing more than one post-secondary qualification in any one country. There are better prospects for achieving this in the Pacific than anywhere else in the world. Donor nations should therefore not continue to act on the assumption that it is in their interest to focus higher education on just one country, rather than on the nations equitably – this can only lead to the benefits being

further skewed, and the majority of countries further marginalised.

6 Benefiting from science and technology

While great strides have been made in recent decades, radical expansion is needed in the teaching of science and technology if Pacific people are to benefit from the potential of the new century. This is particularly important now that the Pacific is moving away from dependence on unprocessed primary products to dependence on knowledge and skills. The post-secondary institutions alone will not be able to change far or fast enough, and much will need to be done by the media, the voluntary and commercial sectors, and educational institutions from kindergarten onwards. They should be given every encouragement, for whatever they achieve will have a positive impact on formal education.

7 Working towards life-long learning

Every Pacific nation has made tremendous strides towards making learning a life-long process. The new technology greatly facilitates the process. Regular consultations (perhaps an annual one-day consultation on progress towards life-long education) between governments and representatives of other sections of the community could enhance the process.

'The divorce of learning from action, which still pervades formal higher education, is being made redundant by the integration of information, theory and action in the work setting....(this) requires that thought be developed in an action context' (Morrison, 1989 p.7). Morrison also notes (1989 p.5) that higher education is changing from a full-time commitment for four years to a part-time commitment for forty years.

Achieving the aim of life-long education requires flexibility. Mike Moore, a former Prime Minister and now Leader of the Opposition in New Zealand, spoke to us enthusiastically of a high school in his electorate which is pioneering an 'all-day' concept, with the regular classes from 9 a.m. to 3 p.m. as usual, followed by optional courses in technology, science, languages, arts and computing. He says pupils, parents, teachers and the community are all supportive. The

Honiara Municipal Authority's planned experiment with voluntary afternoon schools for unemployed young Solomon Islanders is another welcome initiative. Innovative approaches of this kind, with appropriate incentives, should be encouraged throughout the region, at all levels of education.

If trends elsewhere are any indication, the percentage of mature age students will increase, as will the need to facilitate their being able to receive more of their education where they live. We need also to explore the possiblity of encouraging the media to undertake more public education – some of which they already do very well.

8 Strengthening the curriculum

A cultural component is an important part of any curriculum but this has to be seen in the context of providing education of the highest possible quality. We consider the quality of education to be more important than content. It is too easy to equate qualifications, rather than evaluate the quality of the total educational experience.

While there is a strong case for special curricula in all subjects for individual nations, or for Polynesia or Melanesia or Micronesia, or for the Pacific Islands as a whole, this need not be overdone.

New approaches to the teaching of sciences, mathematics, technology and management are being evolved. We need programmes to ensure that the evolving techniques are known and implemented.

We see a strong case for greater emphasis in the whole learning process on health, creativity, ethics and responsibility.

9 Acknowledging mobility

Education systems need to take more account of the increasingly mobile nature of Pacific society. The heightened mobility of Pacific people, particularly in Micronesia and Polynesia, has been remarkable in the past generation. Indications are that it will expand, both within the nation and internationally. The Micronesian countries north of the equator now have free access to USA, the outflow from Polynesia continues, and the Greenhouse Effect and population pressure could lead to some resettlement within or beyond the

region. Education needs to help people to be able to function abroad as well as at home. Where some of the smaller Pacific countries are concerned, more young people are likely to live outside their countries of origin than within them. The rest are likely to spend periods away from home – this is already common for senior civil servants assigned to international agencies and for management staff of international firms – or working at home with people from abroad.

The current attention being given to the development of national culture and identity is consistent with high mobility. To a large extent it is a protective reaction to it. People will be better equipped to handle themselves in the wider world if they are confident in themselves and their own identity. It is a matter of balance. A well devised system of education can encompass both.

10 Ensuring personal development

Beyond education for employment, there is always a need for personal enrichment programmes in local and international culture, art and creativity.

The UNESCO report on education, culture and identity in the Pacific is a useful reference here (Teasdale and Teasdale, eds, 1992). Philosophy and the humanities, science for interested lay persons, communications skills, lectures and discussions on current world affairs; all can widen horizons and develop a community. They need not cost much money. Much is available in books, audiocassettes, disks, videos, television programmes and so on. But places for meeting for discussion and teaching are also valuable. Some churches, some voluntary organisations, and most educational institutions do some work in this field. It merits further promotion.

11 Developing personal and social values

We have come through a period in which the emphasis in education and qualifications has been too heavily on the transmission of skill and information, and not enough on the development of responsibility, integrity and higher values.

A recent UNESCO survey of what we can learn from the

experience of various approaches to education shows the importance of values in education (Futuresco, vol 2, 1992). While the authors are not associated with any religious organisations, we believe the evidence indicates that the quality of graduates of church-related institutions is often higher than those of government institutions or of purely commercial sources of education. This is less so with business in-house systems, though there the values are sometimes narrow. It is time we sought to evolve ethical and value systems better designed for the circumstances of the new generation.

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Ron Crocombe is Professorial Emeritus of the University of the South Pacific. Marjorie Tuainekore Crocombe was until recently Director of the Centre for Pacific Studies at the University of Auckland.

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